

150 Years of the Archaeological Survey of India



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edited by Gautam Sengupta and Abha Narain Lambah

This commemorative volume celebrates 150 years of the establishment of the Archaeological Survey of India, the country's premier organization committed to the preservation and care of its national monuments. The book offers a brief narrative of the foundation and history of the ASI, lavishly illustrated with images selected from the Survey's vast photographic and drawing archives. The early photographic images from the 19th and beginning of the 20th century printed here include some never before published photographs of India's monuments as well as rare photographs showing archaeological excavations and conservation works in progress, and provide a visual overview of the subcontinent's greatest monuments.





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ARCHAEOLOGICAL SURVEY OF INDIA Ministry of Culture, Government of India

Published by The Director General Archaeological Survey of India Ministry of Culture Janpath, New Delhi 110 011 www.asi.nic.in

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Price: ₹ 2500.00

ISBN: 978-93-5086-199-8

Editing, Design, Processing and Production by The Marg Foundation Army & Navy Building, 3rd Floor 148, Mahatma Gandhi Road, Mumbai 400 001 www.marg-art.org

Text Editor: RIVKA ISRAEL

Editorial Team: Savita Chandiramani, Arnavaz K. Bhansali and Rahul D'souza

Designer: Naju Hirani

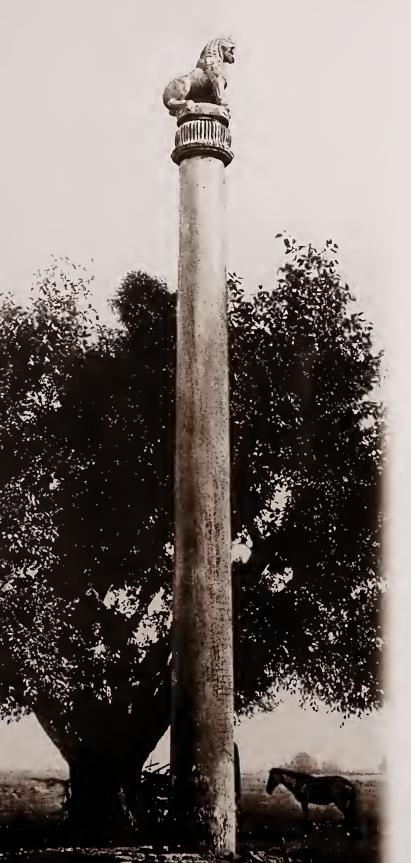
Production: Gautam V. Jadhav

Printed at Silverpoint Press Pvt. Ltd., Navi Mumbai



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कुमारी सैलजा Kumari Selja



संस्कृति मंत्री एवम् आवास और शहरी गरीबी उपशमन मंत्री भारत सरकार

शास्त्री भवन, नई दिल्ली-110115 Minister of Culture

and
Minister of Housing & Urban Poverty Alleviation
Government of India
Shastri Bhawan New Delhi-110115

01 AUE 2012

MESSAGE

Archaeological Survey of India is celebrating its 150th year of establishment. Founded by an indomitable military engineer, Sir Alexander Cunningham in 1861, the Archaeological Survey of India has travelled a long way.

What began as an exciting journey unveiling the mystique of ancient India, evolved into a multi-disciplinary exercise straddling an amazingly wide range of domains – pre-history, proto-history, early and late historical archaeology, epigraphy and numismatics, preservation and conservation, archaeological science and environmental upgradation.

Indeed, over the last 150 years, while conserving the 'ruins and remains' Archaeological Survey of India (ASI) has contributed substantially to our understanding of India's past by revealing unknown facets which have become part of our history. This amazing journey was carefully recorded by surveyors, draughtsmen and photographers – both European and Indian.

Much of the early visuals were shifted outside India during colonial period But what remains, at the ASI headquarters and in its Circle offices, unfold an astonishingly rich visual treasure. There are images dating back to early 20th century occasionally even late 19th century. We felt it an inescapable necessity to make this rich treasure of visuals available to the discerning readers. I am happy that The MARG Foundation has brought out a finely produced volume encapsulating a judicious selection of the visual wealth from ASI archives and other important collections. A number of accompanying essays capture the narratives between 1861 and 2011.

1 am indeed very happy in being able to present this volume for wider readership. I congratulate MARG and Archaeological Survey of India for making it possible.

(Kumari Selja)

Preface

The idea of publishing a volume to celebrate 150 years of the Archaeological Survey of India took birth during a meeting with Dr Pratapaditya Pal at the Marg office in Mumbai. We started with the premise that the book would include 150 select images from the ASI's vast photographic archives in Delhi. We were acutely aware that the ASI library and archives were established only in the early 20th century and would be lacking in images from the foundation years between 1861 and 1902, most of these being in the India Office Collection of the British Library in London. But there were surprises in store for us.

Over six months, an exploration of the Photo Section in the ASI office at Delhi, which involved sifting through hundreds of heavy albums, yielded a vast treasure of images, many never before published. These were broadly catalogued by geographical zone, based on Archaeological Circles. Thus, the Punjab Albums included photographs of the North West Frontier Province, Lahore and West Punjab (now in Pakistan), and Delhi, East Punjab, Himachal and Haryana. Volumes labelled "Indian Tibet" yielded rare photographs of Ladakh, Spiti, Sarahan and other Himalayan sites. Albums marked Bombay included the erstwhile Bombay Presidency with rare photographs of Gujarat, Maharashtra, Bijapur and other parts of Karnataka, while the Madras Albums contained images of monuments across the southern states.

And then, the unexpected happened! Photographs began revealing their secrets when they were scanned in high resolution and enlarged on a monitor. As mentioned above, we had been resigned to getting only post-1902 images for this volume, but hidden in the branches of a tree in an image of a ruined temple in Kashmir, we found a marking "Baker & Burke". Another Burke signature was camouflaged by a thatched roof, in a corner of a black-and-white panoramic view of Srinagar. A photograph of the Sanchi Stupa from the Central India Albums had "D. Diyal" marked on a stone in the foreground, and markings of the studio Wiele & Klein, Madras and Ootacamund appeared in many photographs of temples in Tamil Nadu. The initials JJ appearing in photographs of Ellora were later found to be those of the photographer John Johnston of the 1870s, and a photograph of a temple in Vrindavan carried the marking of Samuel Bourne. Many others were copies of photographs which were sent to the India Office, now in the British Library's Asia, Pacific and Africa Collections. On some images of Fatehpur Sikri and Lucknow Residency, we found markings of the firm Shepherd & Robertson dating to the 1860s, while many photographs of Gujarat and Karnataka bore the initials H.C., for Henry Cousens.

Thus was revealed a repository of early Indian photography in the ASI photo archives, including rare 19th-century photographs by Captain T.H. Biggs, John Johnston, Alexander Rea, William Henry Cornish and John Burke among others. While monuments in Orchha and Datia and sites in Tamil Nadu and Rajasthan are not technically protected as National Monuments by the ASI, we have included these early images as they were taken by archaeological officers or photographers commissioned by the Survey to make a nationwide study of India's monuments. Similarly, photographs of sites in Afghanistan, Myanmar (Burma), Pakistan and Bangladesh with which the Survey was involved have been included to accurately represent a comprehensive narrative of the ASI's work over the last 150 years. Our attempt is to represent the vast spectrum of India's monumental heritage through drawings and photographs and recount the association of the ASI with the subcontinent's monuments since its inception.

This volume is the result of the invaluable contribution of many individuals and organizations. We owe a debt of gratitude to Shraddha Bhatawadekar and Aparajita Das who tirelessly worked with us to ferret through hundreds of albums in the ASI archives, poring over photographs to look for photographer markings on faded images. Our grateful thanks to Shovan Chatterjee, Rajbir Singh and Teja Singh of the Photo Section of the ASI who worked beyond office hours to scan the thousand-plus photographs that were selected before making the final cut for the book. Sincere thanks to Rakesh Sardana and the staff of the Drawing Section of the ASI as well as to the Agra, Vadodara, Guwahati, Delhi, Bhopal, Mumbai and Chennai Circles for sharing archival drawings and information on past repairs. We acknowledge the National Archives of India and the ASI Central Library for access to documents in their collection, and the Indira Gandhi National Centre for the Arts for images from its Deen Dayal Collection. Our sincere thanks to John Falconer of the British Library for allowing us to reproduce five key images from the Asia, Pacific and Africa Collections and for information on early photographers.

This book would not have been possible without the active encouragement and guidance of the Honourable Minister of Culture, Kumari Selja. We are indebted to her for her keen interest in the project. We are also grateful for the guidance and support of the Ministry of Culture under former Secretary, Shri Jawhar Sircar and Smt. Sangita Gairola, Secretary Culture.

A special word of appreciation for all our colleagues in the ASI for their enthusiasm and support. Finally, a big thank you to the editorial, design and production teams at Marg for all their inputs.

Gautam Sengupta

Abha Narain Lambah

Milestones in the ASI's History



Excavations at Lothal, Vadodara Circle, 1950s.

1784	Establishment of the "Asiatick" Society at Calcutta under Sir William Jones
1810	Bengal Resolution XIX, the first attempt to involve the government in intervening through legislation in case of risk to monuments
1811	Repairs carried out at Taj Mahal by Lieutenant J. Taylor
1815	Governor General Hastings sanctions repairs at Sikandra and Fatehpur Sikri
1818	The Buddhist site of Sanchi discovered by General Taylor
1837	Ashokan Brahmi deciphered by James Prinsep
1844	Lieutenant Robert Gill dispatched to Ajanta to document the paintings
1846	Major Markham Kittoe appointed as an Archaeological Enquirer to the North Western Provinces
1847	Delhi Archaeological Society established
1848	Bombay Cave Temple Commission set up by the Bombay Presidency
1848	Survey of the Islamic monuments of Bijapur supervised by Captain Hart of the Bombay Engineers, commissioned by Sir Bartle Frere

1861	Alexander Cunningham appointed as Archaeological Surveyor to the Government of India
1863	Act (XX) promulgated, which vests powers with the government "to prevent injury to and preserve buildings remarkable for their antiquity or for their historical or architectural value"
1863	Robert Bruce Foote discovers the first palaeolithic site at Pallavaram
1866	Suspension of the Archaeological Survey
1867–68	A.C. Carlleyle discovers wall paintings in rock shelters near Sohagighat in District Mirzapur
1868	Government Resolution issues a number of directives to local governments regarding archaeological initiatives
1868-69	Rajendralala Mitra carries out an extensive survey in Orissa
1870	Henry Hardy Cole begins casting operations at Sanchi
1871	Government Resolution passed, appointing Alexander Cunningham as the first Director General of the Archaeological Survey
1871	Joseph David Beglar and A.C.L. Carlleyle commence their survey operations
1871	The plaster cast of the Eastern Gateway of Sanchi Stupa 1 exhibited at the Reproduction Court of the International Exhibition of 1871
1872	First volume of a new Journal of Indian Antiquary published
1873	Sir Stafford Northcote issues a directive that caring for buildings of interest is the duty of local governments
1873	James Burgess appointed as Archaeological Reporter to the Bombay Government

1873	The remains of the Buddhist stupa at Bharhut discovered by Alexander Cunningham
1874	Archaeological Survey of India New Imperial Series started by James Burgess
1877	First volume of <i>Corpus Inscriptionum Indicarum</i> on the inscriptions of Ashoka published, edited by Alexander Cunningham
1878	Treasure Trove Act passed
1880	J.D. Beglar appointed to supervise repairs at Bodh Gaya
1881	Major H.H. Cole appointed as the first Curator of Ancient Monuments
1881	Restoration work at Sanchi begun under the supervision of Austin Mears
1881	James Burgess given additional charge of the Archaeological Survey of Southern India
1882	Major Keith designated Assistant to the Curator of Ancient Monuments
1883	J.F. Fleet appointed as Epigraphist to the Government of India
1885	Reorganization of the Archaeological Survey of India
1885	Rajendralala Mitra is the first Indian to become the President of Asiatic Society of Bengal
1886	James Burgess succeeds Cunningham as Director General
1886	E. Hulzsch appointed as Epigraphist for South Indian Inscriptions
1886–87	Survey by A. Fuhrer and E.W. Smith of the Sharqi architecture of Jaunpur and monuments of Zafarabad, Sahet-Mahet

1889	Archaeological Survey of India abolished as a centralized organization
1890	First volume of South Indian Inscriptions published
1890s	Henry Cousens appointed as Superintendent of Western Circle
1892	First volume of <i>Epigraphia Indica</i> published
1898	The need for a centralized conservation body for archaeology accepted, as the Government once again undertakes this responsibility and proposes five Circles each under an Archaeological Surveyor
1899	An archaeological organization of five Circles and an epigraphist sanctioned
1900	Viceroy Lord Curzon proposes the revival of the post of Director General for the supervision and coordination of the work of the Archaeological Survey of India
1902	John Marshall appointed as Director General of the Archaeological Survey of India
1902	Establishment of a Central Archaeological Library
1902	Annual Reports of the Director General of Archaeology, a new series of publications started by John Marshall
1904	Ancient Monuments Preservation Act passed
1906	Archaeological Survey receives a permanent footing
1919	Memoirs of the Archaeological Survey of India, a new series started
1921	The Government lays down the rule that 40 per cent of the service should be in the hands of Europeans and the remainder filled by Indians

1921	Archaeology listed as a Central Subject
1921	Harappa discovered by Daya Ram Sahni
1921, 1926– 34, 1946–47	Archaeological excavations at Harappa, now in Pakistan
1921–22	Mohenjodaro discovered by R.D. Banerji
1921–22; 1930, 1945	Archaeological excavations at Mohenjodaro, now in Pakistan
1931	Rai Bahadur Daya Ram Sahni first Indian to become Director General
1935	Burma Circle detached from the Archaeological Survey and organized on an independent basis
1938	Sir Leonard Woolley appointed to review Archaeological Survey of India's performance
1944	Government appoints Sir Mortimer Wheeler as Director General of Archaeological Survey of India
1944	Excavation Branch constituted within the Survey by Sir Mortimer Wheeler
1945	Central Advisory Board of Archaeology set up and conservation in Circles centralized
1945	Museums Branch constituted
1945–47, 1989–90 to 1991–92	Archaeological excavations at Arikamedu
1946	Publication of Ancient India, Bulletin of the Archaeological Survey of India

1951	Enactment of the Ancient and Historical Monuments and Archaeological Sites and Remains (Declaration of National Importance) Act
1953–54	Indian Archaeology: A Review, a series of annual volumes launched
1954–55 to 1959–60; 1961–62; 1962–63	Archaeological excavations at Lothal
1958	Ancient Monuments, Archaeological Sites and Remains Act passed
1959	School of Archaeology established by Archaeological Survey of India
1960–61 to 1968–69	Archaeological excavations at Kalibangan
1960-61; 1961-62; 1962-63; 1964-65 to 1966-67; 1968-69; 1971-72; 1973-74	Archaeological excavations at Burzahom
1961–62	Archaeological excavations at Afyeh and Tumas Cemetery of C-group People, Nubia, Egypt
1961-62	Archaeological excavations at Kudan, Taulihawa and Tilaura-kot, Nepal
1969–1977	Conservation of the colossal Buddha statues in Bamiyan, Afghanistan

1970–71; 1971–72	Archaeological excavations at Surkotada
1972	Antiquities and Art Treasures Act passed
1983	Archaeological excavations at Madinat Hammad, Bahrain
1984–85; 1989–2000	Major excavations at the Harappan site of Dholavira
1986–93	Conservation of the temple complex of Angkor Wat in Cambodia
1993–94; 1995–96; 1996–97; 1997–98; 1999–2000	Archaeological excavations at Sanchi
2004 till present	Conservation of Ta Prohm Temple complex in Cambodia
2009 onwards	Conservation of Vat Phou Complex in Laos
2010	Amendment to the Ancient Monuments, Archaeological Sites and Remains Act passed





Early Explorations in Indian Archaeology and the Foundation of the ASI

Athrough Asia in the 15th century, and married an Indian woman who bore him four children.¹ Conti recounted the tales of his travels to Pero Tafur, a Spanish nobleman, and Giovanni Bracciolini, the papal secretary, and there was ample scope for interpretation and embellishment as the story was retold. The pioneering English traveller Ralph Fitch arrived in India in the 1580s during the reign of Queen Elizabeth, bearing her letter to Emperor Akbar.² While most early travellers were propelled by political, trade or missionary interests, adventurers such as Thomas Coryat (1577–1617) explored India, viewing its cities and monuments and claiming to "not leave a pillar or a tomb nor character unobserved in all of Asia".³

Though many of these travellers had a tendency to exaggerate in their accounts of India, they introduced the subcontinent to a European audience and left behind descriptions of many monuments and sites. Vijayanagara was visited by Nicolo de Conti, Ludovicodi Varthema, Abdur Razzak and Duarte Barbosa, and Bijapur by Jean Baptiste Tavernier; Jean de Thevenot and Francois Bernier. Fitch described the sights of Agra and Delhi; Hyderabad was described by Coryat; and the cave temples of western India were explored by Thevenot, Henry Salt, John Fryer, Garcia da Orta, Carsten Niebuhr and Walter Hamilton.⁴

From Adventurism to Research

Over the 18th and 19th centuries, hundreds of explorers and adventurers as well as military men who served the East India Company traversed India's sites. Most were interested in collecting antiquities, digging up ancient stupas in search of relics or carrying away sculptural friezes as mementos. Many

1

An 1880s photograph by Deen Dayal, showing a group of English gentlemen and ladies picnicking at a monument in central India. The image presents an interesting composition of British sahibs and memsahibs posing in front of an ancient Hindu temple. Notice the ladies are all carrying parasols to shade themselves from the harsh Indian sun. Image courtesy Indira Gandhi National Centre for the Arts (IGNCA), New Delhi.



Early photographic view of Mamallapuram, with an Englishman in army uniform sitting behind the monolithic elephant sculpture, holding a double-barrel gun. Over the 18th and 19th centuries, hundreds of explorers and adventurers as well as military men who served the East India Company traversed India's sites. The stone-cut Rathas of Mamallapuram and monolithic sculptures of bull, elephant and lion in Kanchipuram district are protected by the Chennai Circle of ASI.



Photograph of the Stupa at Amaravati, Guntur District, Andhra Pradesh, from the ASI's Madras Albums, 1917–19. Colonel Colin Mackenzie of the Trigonometrical Survey discovered the stupa in 1797. When he visited the site for the second time in 1816, he carted away to England some of its finest sculptural reliefs. Of the vast wealth of sculptures yielded by this stupa, a good number are at the British Museum in London, Musée Guimet in Paris, National Museum in New Delhi, Indian Museum in Kolkata and Government Museum in Chennai. ASI officers such as James Burgess, Sri T.N. Ramachandran, Alexander Rea, R. Subrahmanyam, K. Krishna Murthi and I. Karthikeya Sarma worked at the site.

The remains at Amaravati are protected by ASI through its Hyderabad Circle.

were profiteers with just a sketchy understanding of history, fired by the idea of discovering a hoard of ancient coins or sculptures. Others were missionaries, naturalists, surgeons or engineers who had a personal interest in coins, linguistics, religion or antiquities. Apart from the usual mercenaries and profiteers looking for ancient coins and collectibles, even an antiquarian such as Sir Colin Mackenzie was not averse to carting away to England some of the finest sculptural reliefs from Amaravati when he visited the site for the second time in 1816. Home Department Proceedings recorded, "Mr. Wilson, the sub-collector tells me that he visited Oomrawuttee, and that nearly every sculpture has been dug out. Some are said to have been sent to England and some are in the library at Bezwada."⁵

These early amateur explorations into India's antiquities eventually led to the rise of greater scholarship and research into its linguistics, epigraphy, literature and philosophy. The establishment of the Asiatic Society of Bengal heralded serious scholarship and the birth of Indology. Two men can claim the credit for this shift from treasure-hunting to scientific research – Sir William Jones and James Prinsep. Sir William Jones arrived in Calcutta on September 25, 1783 as the Puisne Judge of the Supreme Court. A scholar and linguist, he established the identification of Chandragupta Maurya with the Sandrokottos of Greek and Latin sources, setting the first chronological benchmark for Indian history. On January 15, 1784, along with 30 European fellow-antiquarians, Jones founded the Asiatic Society.

James Prinsep, Assay Master of the Calcutta Mint from 1832 to 1840, gave the investigation into India's past a new direction as Secretary of the Asiatic Society. The son of an East India Company agent and nephew of Governor General Warren Hastings' secretary, Prinsep argued for the idea of scientific exploration in Indian archaeology and accurate surveys. A scholar in epigraphy, he deciphered Ashoka's inscription at Sanchi, unlocking the mysteries of the Ashokan Brahmi script.

On Prinsep's death in 1840, his legacy was carried forward by his friends and associates. Markham Kittoe, an army officer deputed to the Coal Committee, toured Orissa and studied its archaeological remains. After a stint as Road Officer, he was appointed Archaeological Enquirer to the Government in 1846 to work on exploring Buddhist sites in the East.⁶ Others such as Colonel James Tod (1782–1835) focused on Rajputana, Lieutenant Colonel F.C. Maisey on central and northern India, and Indian scholar Rajendralala Mitra (1823/24–91) on eastern India. Dr James Stevenson and another Indian, Dr Bhau Daji Lad (1822–74), devoted their research to epigraphy and anthropology in western India, while Colonel Meadows Taylor surveyed the megaliths of southern India and Sir Walter Elliot worked in Madras. But the mantle of leadership in Indian archaeology was to fall on Alexander Cunningham.⁷





This group photograph by Hurrichund Chintamon was shown at the Paris Exhibition of 1867, and is from the ASI Collections of the British Library. The seated figure wearing a shawl, is Dr Bhau Daji Lad, a pioneering Indian scholar who devoted his research to epigraphy and anthropology in western India. Hurrichund Chintamon, a pioneering Indian photographer, established his photographic practice in Bombay (now Mumbai) in the 1850s. Image courtesy Asia, Pacific & Africa Collections, The British Library, London.

5 (opposite)

Photograph of General Alexander Cunningham (1814-93). Cunningham, a military engineer, served with the Bengal Engineers and later as Executive Engineer in Gwalior State, Multan and Burma. He was a self-taught archaeologist and was appointed to head the Archaeological Survey in December 1861. He surveyed areas stretching from Gaya in the east to the Indus in the northwest, and from Kalsi in the north to the Narmada in the south, between 1861 and 1866, largely following in the footsteps of the Chinese pilgrim Xuanzang. However, his endeavours came to a sudden halt due to the abolition of the Archaeological Survey in 1866 by Viceroy Sir John Lawrence. The Archaeological Survey was later revived and Cunningham appointed Director General, assuming charge in February 1871, which he held until 1885.

6

Photograph of repairs being undertaken along the western face of the Taj Mahal, taken from across the Yamuna by an unknown ASI photographer, early 20th century.

An immense mausoleum of white marble, built in Agra between I63I and I648 by order of Emperor Shahjahan in memory of his favourite wife, the Taj Mahal is the jewel of Indo-Islamic architecture and one of the universally admired masterpieces of the world. This UNESCO World Heritage Site is protected by the Agra Circle of ASI.



Archaeological and Literary Societies

Archaeological societies became the natural successors to early antiquarian societies and were the precursors of the Archaeological Survey of India. These groups of amateurs, hobbyists and some experts laid the foundation for scientific archaeological research and investigation in the 19th century. The Archaeological Society of Delhi established in 1847 was the first to be devoted exclusively to archaeological activity. Before that, the Literary Society of Bombay published drawings of the Bagh caves in a text by Captain F. Dangerfield and William Erskine, and of the Elephanta caves by Henry Salt, both in 1819–20.8

The Archaeological Society of Agra founded in 1874 had Governor General Lord Northbrook as its patron, and the Honourable Sir J. Strachey and General Alexander Cunningham as vice patrons. *Transactions of the Archaeological Society of Agra* records as its council members Europeans such as Jas. Simson, Magistrate and Collector, Lieutenant Colonel J. Pritchard of the Royal Engineers, A. Christison, a Civil Surgeon, and Colonel J. Baillie, as well as Indians such as Moonshee Sheo Narain, Sheikh Nujmooddeen Haider, Lalla Bahal Raie, Rai Muthra Doss and Pandit Jugunath. Members had to pay a subscription of Rs 2 a month or a life membership of Rs 100. The council was empowered to appoint a special committee "of no less than three members to carry out investigations such as excavations and surveys, or for the purpose of drawing up reports, or translating inscriptions or manuscripts".9

Others contributed with descriptive accounts of monuments and sites. A journal published by the Madras Literary Society and Auxiliary Royal Asiatic Society in 1844 included a guide to the seven pagodas of Mahabalipuram along with a map of 1808 by Colonel William Mackenzie, as well as the Sixth Report on the Mackenzie Papers by the Reverend William Taylor. ¹⁰

GOVERNMENT SUPPORT FOR ARCHAEOLOGY AND CONSERVATION

While scholars and adventurers scoured India's sites, archaeological investigations were largely individual efforts, with virtually no support from the East India Company. Among the earliest initiatives was that of Governor General Minto (1807–13), who appointed a Committee to look after the maintenance of the Taj Mahal. Repairs to the tune of 1,00,000 rupees were carried out by Lieutenant (later Colonel) J. Taylor, who inscribed his name and the date 1811 on the crescent of the dome. In 1815, Governor General Hastings sanctioned repairs at Sikandra and Fatehpur Sikri and in 1816, Taylor was dispatched to Sikandra to oversee repairs at Akbar's tomb. But the very next year, perhaps in

7

This 1862 photograph of the Baillie Guard Gate 18 by Shepherd & Robertson, the studio established by Charles Shepherd and Arthur Robertson in Agra in 1862. The ruins of the Baillie Gate of the British Residency in Lucknow were an iconic symbol and reminder of the happenings of 1857, and this image evokes the strong British sentiment connected with the event. Similar views were captured by Felice Beato, Major Robert Tytler, James Ricalton and other European photographers.

The buildings of the Residency in Lucknow are protected as National Monuments by the ASI within its Lucknow Circle, Uttar Pradesh.





A 19th-century photograph showing the Jami Masjid, Delhi from the southeast corner. Visible in the foreground are camel-drawn carriages.

Emperor Shahjahan's new city of Delhi (Shahjahanabad) along the banks of the Yamuna was crowned with the largest mosque of its time, the congregational mosque or Jami Masjid (1644–58). In the immediate aftermath of the First War of Independence of 1857, Sir John Lawrence, Chief Commissioner of the Punjab, had to personally step in to save the Jami Masjid from demolition by East India Company forces.

9

A 19th-century photograph by Lala Deen Dayal, showing a British officer seated on a stone platform in front of the octagonal tower of the Musamman Burj, Agra Fort. The Musamman Burj was where Emperor Shahjahan, imprisoned in Agra Fort by his son Aurangzeb, spent the last years of his life, gazing at the Taj Mahal, the mausoleum of his beloved wife.

Agra Fort, including the Musamman Burj and Pachisi Court, is a National Monument protected by the Agra Circle of ASI, and a UNESCO World Heritage Site.

Image courtesy Indira Gandhi National Centre for the Arts (IGNCA), New Delhi.





One of the earliest photographs of Fatehpur Sikri, by Shepherd & Robertson, from the 1860s. This photograph of Anoop Talao and Panch Mahal shows the greatly deteriorated condition of the structures of Fatehpur Sikri. Later photographs by Edmund William Smith of 1893 show the buildings in a much better state of repair. Fatehpur Sikri served as the capital of Emperor Akbar and was occupied between 1573 and 1585. It presents an outstanding example of Mughal city planning and architecture. It is protected under the Agra Circle of ASI and is a UNESCO World Heritage Site.

11

Humayun's Tomb, mausoleum of the second Mughal emperor, built in 1565, Delhi. Henry Hardy Cole reported, "the tomb itself is in a fair state of repair, but the terrace on which it stands has lost more than half its stone railing, and the arches supporting the terrace stand in need of repair; much of the marble inlay is defaced. The enclosure in which the tomb stands was formerly a beautiful garden, with terraced walks and entrance buildings at the centre of each wall. Now the ground has lost all the character of a garden, and is let out in patches to cultivators who grow cabbages and tobacco. The gateways are all in a state of great disrepair, and should at all events be cleaned and made secure against weather.... I think the system of letting out the gardens of tombs to cultivators a very unworthy means of adding to municipal funds." The monument is protected within ASI's Delhi Circle and recent conservation works have been undertaken by the ASI in partnership with the Aga Khan Trust for Culture under the aegis of the National Culture Fund.



a bid to recover costs, pensions of the deceased *khadims* or attendants at the Taj were discontinued and fruits from its gardens were sold to fill government coffers.

During the Governor Generalship of Lord Amherst (1823–28), Captain Robert Smith carried out extensive repairs to the Qutb Minar. The sum of Rs 93 was sanctioned for the maintenance of Rambagh, and the annual outlay for the conservation of the Taj and Akbar's mausoleum at Sikandra did not exceed Rs 1,000.¹³ These, however, were isolated cases and there was no sustained support for archaeology or conservation during the subsequent tenures of Governors General Bentinck and Ellenborough. In fact, during the term of Lord William Bentinck (1828–35), a proposal to demolish the Taj Mahal and to auction its marble was seriously considered, as well as a scheme to lease the gardens of Akbar's mausoleum at Sikandra for cultivation.¹⁴

In 1848, during the term of Governor General Marquess of Dalhousie (1848–56), Sir Bartle Frere (who was then Political Resident at Satara) commissioned a survey of the Islamic monuments of Bijapur, supervised by Captain Hart of the Bombay Engineers. Later in 1855, as Commissioner of Sindh, Frere convinced Lord Elphinstone, Governor of Bombay Presidency, to sanction Rs 5,000 towards the repair of the monuments at Thatta in Sindh. In 1863, as Governor of Bombay, Frere approved of an annual grant of Rs 2,480 towards repairs of the monuments of Bijapur. In 1867, the first systematic documentation and repair of monuments in the Bombay Presidency was initiated with Rs 5,300 and 5,000 sanctioned for the repair of Shah Alam's tomb and the Islamic monuments at Sarkhej near Ahmedabad, respectively.

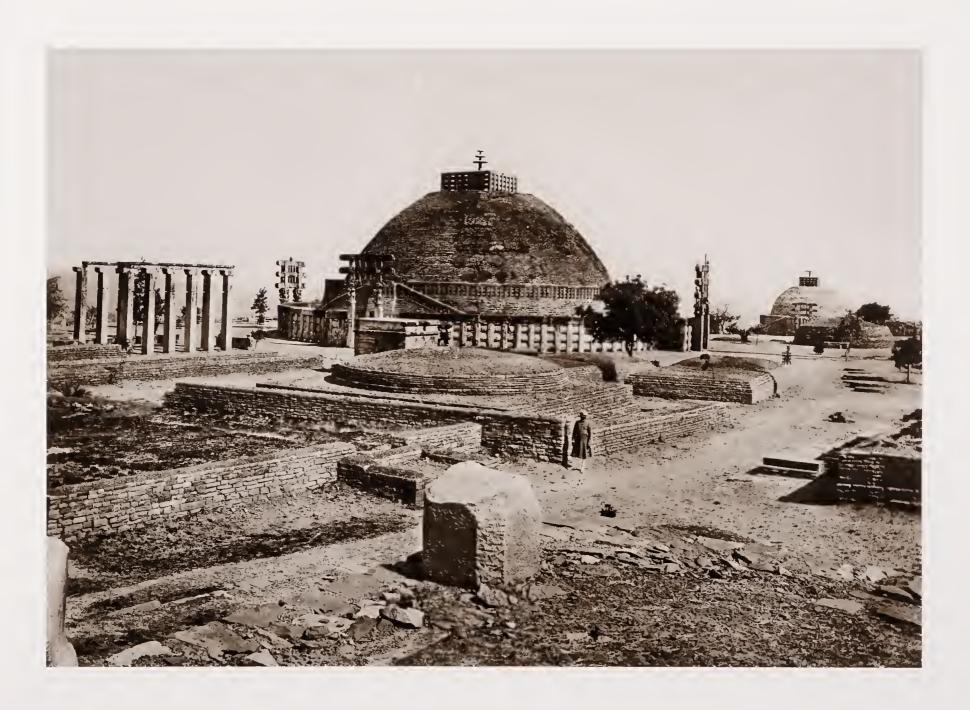
ESTABLISHING THE ARCHAEOLOGICAL SURVEY

Many monuments of Mughal India were exposed to grave danger in the immediate aftermath of the First War of Independence of 1857.¹⁵ While Sir John Lawrence (Chief Commissioner of the Punjab) had to personally step in to save the Jami Masjid in Delhi from demolition by East India Company forces, ¹⁶ military barracks were built within the Red Fort in Delhi and the marble bath in Shahjahan's palace was removed and later auctioned. On a visit to the Red Fort in October 1885, Lady Dufferin noted, "The walls, ceilings and floors are all mosaic...sadly destroyed in some places by the desecrating hands of people who like to carry away relics.... There is only the Great Mogul's Seat of Justice... on the wall behind it birds and fruits done in brilliant colours, also in mosaic. This lovely place is now used as a canteen, and next to these wonderful works of ancient days is pasted up a picture advertisement!"¹⁷

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General view from the southeast, showing the layout of the ancient precincts of the Group of Buddhist Monuments at Sanchi, District Raisen, Madhya Pradesh, early 20th century. *Monuments of Sanchi* by Sir John Marshall published in 1926 carried details of the works at site.

The monuments are today inscribed as a UNESCO World Heritage Site and are among the most significant Buddhist sites in the world. They are protected by the ASI through its Bhopal Circle.





View of the ruins of Vijayanagara, Hampi, by Edmund David Lyon, c. 1868. This photograph shows the stone chariot and collapsed mandapas of the Vitthala Temple, overgrown with vegetation. Captain Alexander Greenlaw photographed the monuments of Vijayanagara in 1856. In December 1882, Mr H. Black was appointed Assistant Engineer for Monumental Preservation, and by March 1883 he was successful in clearing vegetation from 110 buildings as well as inspecting the Vitthala Temple in order to prepare an estimate for structural repairs.

The temple complex is today part of the UNESCO World Heritage Site of Hampi in Karnataka, within the Bangalore Circle of ASI.

A 19th-century report on Fatehpur Sikri recorded, "Akbar's office in use as a dak bungalow and the Birbul palace and the house of Miriam, one of Akbar's wives are occasionally occupied by Europeans." ¹⁸ It also reported that Humayun's Tomb had lost half its railings on the terrace, its gardens let out to cultivators to grow cabbage and tobacco. At the turn of the century Lord Curzon recorded his dismay at Ahmedabad's Sidi Sayyed Mosque having being turned into a tehsil office, and rued the fact that in honour of the Prince of Wales's visit in 1876, the red sandstone pillars of the Diwan-e-Am in Delhi's Red Fort had been whitewashed.¹⁹

With the transfer of power from the East India Company to the British Crown, there emerged a shift in British approach to India's monuments and a re-evaluation of the government's responsibility towards India's ancient sites. In 1861, Alexander Cunningham, a military engineer, had placed before Viceroy Lord Canning a memorandum stating, "During the one hundred years of British dominion in India, the Government has done little or nothing towards the preservation of its ancient monuments, which, in the almost total absence of any written history, form the only reliable sources of information as to the early condition of the country." Cunningham was appointed the first Archaeological Surveyor on December 1, 1861 at a salary of "Rupees four hundred and fifty a month, with Rupees two hundred and fifty when in the field to defray the cost of making surveys and measurements, and of other mechanical assistance. If something more should be necessary to obtain the services of a native subordinate of the Medical or Public Works Department, competent to take photographic views, it should be given." He laid the foundation of this now colossal organization, firmly establishing his role as India's pioneering archaeologist. As Director General of the Archaeological Survey for a term of fifteen years, Cunningham was the first to pursue an extensive survey of India's archaeological sites.

From Archaeological Investigation to Architectural Conservation

While Cunningham pursued his passion for tracing Buddhist monuments from the accounts of Chinese pilgrims, he was assisted by J.D. Beglar and A.C.L. Carlleyle in the recording of monumental remains. For the first decade of the establishment of the Archaeological Survey, archaeological excavation and recording remained its mainstay, with repairs to monuments mostly consigned to engineers of the Department of Public Works. A government resolution entitled *Conservation of ancient architectural structures or their remains in India* was issued on February 29, 1868, that made mandatory the insertion of a separate chapter on archaeology in every annual administration report of the government. It directed that "petty repairs" were to be directly dealt with by local governments and large-scale operations were to be referred to the consideration of the Department of Public Works.²²



Detail from a photograph of Teli-ka-Mandir, Gwalior Fort, by Lala Deen Dayal. An Englishman possibly Major Keith) stands on the steps of the temple. Another view of the same temple by Deen Dayal, in the British Library collection, shows the same person posing by a bench at the bottom of the steps. Repairs to the temple between 1881 and 1883 were supervised by Major Keith, officer of the Royal Scots stationed at Gwalior, who in 1880 had rescued the temple from being used as a coffee shop by the other officers. In October 1882, Major Keith was assigned as a temporary assistant to the Curator of Ancient Monuments for Central India.

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Photograph of Teli-ka-Mandir, Gwalior Fort, showing the temple covered with scaffolding as part of repairs supervised by Major Keith between 1881 and 1883. An estimate of Rs 1,668 was drawn up for the roof repairs. Cole mentions that the works in Gwalior were keenly supported by Lepel Griffin with funds from the imperial government and from Maharaja Madho Rao Scindia. The imperial government made a grant of Rs 5,000 and another of Rs 2,500 in 1882 for works at the temples and fort of Gwalior, and the Maharaja gave Rs 4,000. Cole made visits to Gwalior in November 1880 and July 1881.



Architectural historian James Fergusson argued the importance of architectural documentation, commenting on Cunningham's fixation with archaeological investigation: "The publication of the five volumes of General Cunningham's 'Archaeological Reports' has thrown new light on many obscure points, but generally from an archaeological rather than from an architectural point of view...."²³

In 1873, Secretary of State for India Sir Stafford Northcote issued a directive that caring for buildings of interest was the duty of all local governments. This created a fundamental change in the government's attitude towards India's monuments, with the focus shifting from archaeological excavation to architectural documentation and preservation. The following year, a memorandum was signed by 37 leading personalities of the day, including Duleep Singh (son of Maharaja Ranjit Singh) the last Sikh ruler of Punjab, Stafford Northcote (now Chancellor of the Exchequer), Albert Sassoon (son of Bombay's Jewish philanthropist David Sassoon), Henry Bartle Frere, James Fergusson and architect George Gilbert Scott, demanding the preservation of India's monuments.

In 1874, General Alexander Cunningham submitted a proposal to the Government, recommending that all ancient buildings not in living worship should be placed under the charge of the civil government, setting the foundation for the idea of national monuments.

The administration of Viceroy Lord Lytton (1876–80) saw an initiative to secure India's architectural legacy. In 1878, the Madras Government ordered the clearance of vegetation around the monuments of Vijayanagara. A princely sum of Rs 3,75,000 was sanctioned for the restoration of buildings in the North West Frontier Provinces, and in 1879 Major Charles Mant was appointed Conservator of Archaeological and Architectural Remains in Bombay. In 1880, Lord Lytton proposed to the Secretary of State Marquess of Salisbury, the creation of a post of Curator of Ancient Monuments in India, setting the stage for a concerted policy and administrative set-up for the preservation of India's monuments.

The post was created in the following year during the tenure of Lytton's successor, Marquess of Ripon. On January 28, 1881, Henry Hardy Cole was appointed the first Curator of Ancient Monuments. The government order stated, "Her Majesty's Secretary of State having sanctioned the appointment of a Curator of Ancient Monuments whose duties will be to Superintend, under the Supreme Government, the conservation of the most celebrated and important examples of National archaeology and architecture throughout India...to inspect the principal monuments throughout India, the historical

Sculptures from Mian Khan (in present-day Pakistan) including Bodhisatva figures and fragments from friezes, all boxed for transportation. This photograph taken around 1883, and attributed to Henry Hardy Cole, is from the ASI Collections of the British Library. Cole advocated repair of buildings in situ over carting away sculptures to museums in England.

Image courtesy Asia, Pacific & Africa Collections, The British Library, London.



and archaeological value of many of which has been brought to notice by General Cunningham and the other officers engaged in the Archaeological Survey of India, in order to frame a scheme for their protection and conservation."²⁴

This spelt a distinct shift in government policy and of that of the Archaeological Survey of India from a focus on merely excavation and archaeological investigation, to a greater realization that historic monuments and buildings required a sustained effort towards their preservation and care. Thus, within a few decades of its establishment, the ASI had expanded its mandate from primarily one of archaeological investigation, to cover a wider spectrum.

The Curator, appointed for a period of three years, was to be assisted by a band of special officers, given charge of conserving monuments in their areas. Beglar was appointed Executive Engineer for supervising works at Bodh Gaya, Mr Heath was appointed Executive Engineer Archaeological Division for North West Provinces and Oudh, Lieutenant Abbot and Mr Black were appointed Assistant Engineers for Punjab and Madras and Major Keith was appointed Assistant to the Curator for Ancient Monuments. James Burgess, who had been made Archaeological Reporter to the Bombay Government in 1873, was appointed to the Archaeological Survey of Madras in 1881 and eventually succeeded Cunningham as Director General.

Apart from the ambitious exercise of mapping India's monuments, Cole's greatest contribution was that of establishing benchmarks for conservation and in-situ preservation of monuments. He argued that the keenest investigators had not shown the necessary respect for the maintenance of monuments and that though the temptation to carry away original stones was great (citing the cases of the Elgin marbles and Egypt's treasures), in the case of India, the arguments were different: "We are, I submit, responsible for Indian monuments, and that they are preserved in situ, when possible." He prescribed the encouragement of local interest in monuments to secure the fabric from damage and drew up an exhaustive list of monuments that would benefit from imperial funds or those of "Local Governments and Native Rulers", citing the condition of and documentation available for each.

In his "Memorandum on the Conservation of Ancient and Other Architectural Remains in India", Cole comprehensively defined conservation a century before the International Charter of Venice. He wrote, "I use the word conservation because it seems to include all that is required for the protection of works of art, and for the production of permanent and convenient methods for facilitating their



Detail of a group photograph by Lala Deen Dayal, showing Lord and Lady Curzon. As Viceroy of India (1899–1905), Curzon was among the greatest supporters of the conservation movement, and he defined the direction the ASI was to follow for the next 100 years.

Image courtesy Indira Gandhi National Centre for the Arts (IGNCA), New Delhi. useful study. Under conservation may be included 1. Custody 2. Preservation 3. Restoration 4. Illustration."²⁶ He went on to define preservation and restoration, enlisting the tasks under each, also suggesting that each district should have a District Manual, giving a brief account of the most interesting buildings of that area in English as well as the local vernacular to generate greater awareness.

Cole advocated the establishment of separate divisions for Bengal, Punjab, Central Provinces, Rajputana and Central India, Bombay and Hyderabad, as well as Madras and Mysore, in addition to the North West Provinces, to look after special repairs, preservation and preparation of illustrations of ancient monuments. He argued for the establishment of a new division called the "Architectural Division", under an Executive Engineer with special qualifications who, he recommended, should take the help of the Mayo School of Arts in Lahore (today National College of Arts, Pakistan) and be assisted by a photographer, preferably employing students trained by Lockwood Kipling at the Jamsetjee Jeejeebhoy School of Art, Bombay. This idea, with some modifications, was implemented in 1899 under the administration of Lord Elgin. India was divided into five Circles, each with an Archaeological Surveyor paid from imperial tevenues, laying the foundation for the Archaeological Survey of India Circles that exist to the present day.²⁷

By 1902, John Marshall was appointed to the post of Director General with his duties "extended considerably beyond the direction and control of archaeological research…to extend to the exercise of a general supervision over all the archaeological work of the country, whether it be that of excavation, or preservation, or repair, or of the registration and description of monuments and ancient remains, or of antiquarian research". This was to fundamentally change the character of the Archaeological Survey within a few decades of its establishment, from an institution primarily engaged in matters of archaeological investigation and recording, to becoming the official custodian of India's monumental heritage.

In 1900 Viceroy Lord Curzon had aptly defined the direction the ASI was to follow for the next 100 years, announcing, "Epigraphy should not be set behind research any more than research should be set behind conservation. All are ordered parts of any scientific scheme of antiquarian work. I am not one of those who think the Government can afford to patronise the one and ignore the other. It is, in my judgement, equally our duty to dig and discover, to classify, reproduce and describe, to copy and deciphet, and to cherish and conserve."²⁹

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- 4 Clements R. Markham, *A Memoir on the Indian Survey*, Printed by Order of Her Majesty's Secretary of State for India in Council, London, 1871, 2nd edition 1878.
- 5 Proceedings Nos. 90/91, Home Department, August 22, 1868, National Archives of India.
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- 8 Transactions of the Literary Society of Bombay with Engravings, Vols. 1 and 2, London, 1820, reprinted by the Bombay Education Society's Press, 1876.
- 9 Transactions of the Archaeological Society of Agra, Delhi Gazette, Agra, 1874, p. 4.
- 10 Madras Journal of Literature & Science, edited by the Committee of the Madras Literary Society & Auxiliary Royal Asiatic Society, No. 30 (June 1844), p. 56.
- 11 Cunningham in his memorandum to Lord Canning remarked, "All that has hitherto been done towards the illustration of ancient Indian history has been due to the unaided efforts of private individuals. These researches consequently have always been desultory and unconnected and frequently incomplete, owing partly to the short stay which individual officers usually make at any particular place, and partly to the limited leisure which could be devoted to such pursuits." See Cunningham, Four Reports made during the Years 1862–63, 64–65.
- 12 Records of a meeting of the Archaeological Society of Agra held on Saturday evening May 16, 1874 at 9:30: "J.W. Alexander Esq., exhibited the drawings of the various buildings in the Fort now undergoing restoration, which were much admired by the members. He also called attention to the fact of these buildings having been partially repaired (as well as the Taj) by Col. J. Taylor in 1811 who had inscribed his name with this date on the crescent on the dome of the Taj where it was still to be seen. Col. Taylor lies buried in the cemetery on the brigade parade ground at Agra."
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- 20 Cunningham, Four Reports made during the Years 1862-63, 64-65.
- 21 Ibid.
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- 26 Ibid., Appendix H ii: "Memorandum on the Conservation of Ancient and Other Architectural Remains in India".
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Mapping India's Monuments: Early Documentation, Architectural Casts and Photography

THE EARLIEST SURVEYS OF INDIA BY THE BRITISH began as maritime maps. For the first two decades of the 17th century, the East India Company set forth on an annual voyage to India, its sailors diligently plotting charts.¹ Later, the Bombay Marines trained the first generation of Indian surveyors. Captain John Ritchie, Hydrographical Surveyor to the East India Company from 1770 to 1785, surveyed the coasts of Bengal. Midshipman James Rennell, who rose under Robert Clive to become Surveyor General of Bengal, surveyed an area of 900 square miles (2,331 square kilometres) between 1763 and 1782, mapping the rivers Ganga and Brahmaputra, to create his famous Map of Hindustan.²

Picturesque views by English artists gave Europeans the earliest visuals of India. Some like William Hodges were professional artists; others such as Captain Robert Melville Grindlay, served with the East India Company. Thomas Daniell along with his nephew William travelled across India and compiled six large folio volumes of 120 coloured views, between 1790 and 1809.³ An auction catalogue of Thomas and William Daniell's work published by Christie & Manson in 1840 included "Cotsea Palace & Cuttub Minar Delhi, Taje Mahal at Agra, The Gate of Sultan Chrusero's Garden Allahabad, Serinaghr, Benaras, Salsette, Rohtas Ghur, Calcutta, Gya, Hindoo Temple at Bindrabund, Gate of the Tomb of the Emperor Ackbar at Secundra, The Great Mosque at Juanpore, Views of Fyzabad in the province of Oude, The Old Gaut at Kurdwar, The Ruins of Madura, Views at Cawnpore and Bogwanpore, Views near Bangalore, Trichinopoly &c."⁴

These early watercolours and engravings caught the fancy of the English gentry. The fantastical representation of domes and temples found resonance in the romanticized designs of buildings such as the Royal Pavilion at Brighton. Orientalism became a rage in Regency England, spawning a generation of enthusiasts eager to set sail for India.

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Cave 32, Indra Sabha, at Ellora by J. Johnston, 1874, from a glass plate negative. The initials II appear reversed at the bottom corner of the photograph. J. Johnston photographed extensively in Berar and Hyderabad. This image was published in Report on the Elura Cave Temples and the Brahmanical and Jaina Caves in Western India, Archaeological Survey of Western India Vol. 5, by James Burgess. It shows the gateway of the Indra Sabha as well as the monolithic pillar before it fell over. Standing at the right of the entranceway is possibly the photograher himself. The Ellora Caves in Maharashtra constitute a World Heritage Site under the protection of the ASI within its Aurangabad Circle. The south-facing Indra Sabha is the most impressive of the Jain caves at Ellora.

ARCHITECTURAL DOCUMENTATION

Sir Colin Mackenzie pursued an antiquarian agenda over a period of thirty-nine years, at first as a military officer and later as Surveyor General. His team of draftsmen prepared 2,630 measured drawings and seventy-eight plans of historical sites in southern India. Mackenzie's antiquarian explorations were largely self-funded and upon his death in 1821, a large part of his collection was purchased from his widow by the Marquess of Hastings on behalf of the East India Company, for £10,000.5

Others such as Henry Salt, William Erskine and Markham Kittoe contributed invaluable volumes of illustrations to the early documentation of India's monuments. Francis Buchanan, a surgeon who surveyed Mysore and Gaya, was among the first to take precise measurements of monuments. James Prinsep urged, "What the learned world demands of us in India is to be quite certain of our data, to place the monumental record before them exactly as it now exists, and to interpret it faithfully and literally."

Lord Hardinge (1844–48) persuaded the Court of Directors of the East India Company to sanction arrangements for the examination, delineation and record of some of the chief Indian antiquities. In 1844, the East India Company dispatched Lieutenant Robert Gill serving with the Madras Army, to Ajanta.⁸ Over the next 27 years, Gill sketched and photographed the Ajanta caves. His copies of the paintings of Ajanta adorned the Crystal Palace at Sydenham where, unfortunately, they were later destroyed in a fire.⁹

General Alexander Cunningham had advocated a nationwide mapping of India's archaeological remains as early as 1848. In 1861, Lord Canning appointed him to the Archaeological Survey with the objective of overseeing "an accurate description – illustrated by plans, measurements and drawings or photographs". An ambitious plan of mapping India's monuments was initiated. Cunningham wrote, "for the purposes of the survey, I divided the whole country into three nearly equal sections: all the districts to the north of the Jumna forming the northern or Agra section; those to the west of the Grand Trunk Road running from Agra to Indore forming the south west or Ajmer section; and those to the east of the road forming the south east or Bundelkhand section. To Mr. Carlleyle I entrusted the survey of Rajputana, and to Mr Beglar that of Bundelkhand, reserving the northern section for my own share of the work." When claiming to divide the whole country into three equal sections, Cunningham failed to mention that he was merely dividing India north of the Vindhyas. The Deccan

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Self-portrait of Major Robert Gill seated at the doorway of Cave 24 at Ajanta, c. 1868–70, from the British Library's ASI Collections. Sent to document Ajanta in 1844, Robert Gill spent 27 years at site, replicating the paintings and taking photographs.

The Ajanta World Heritage Site in Maharashtra is protected by the ASI Aurangabad Circle. Image courtesy Asia, Pacific & Africa Collections, The British Library, London.



View of the ruins of the East Gate of Jamt Masjid, Jaunpur. Photographs of Jaunpur were taken by both Joseph Beglar and E.W. Smith as officers of the Survey in the 19th century.

Jaunpur, in eastern Uttar Pradesh, is located about 60 kilometres east of Varanasi and is home to the medieval Sharqi mosques. The grandest of the Sultanate mosques, the Jami Masjid was completed in 1473 by Hussain Shah Sharqi. Its lofty East Gate was destroyed by the armies of Sikandar Lodi who besieged Jaunpur in 1480. Recently, over a period of twenty years, the local community has reconstructed this gate. The monument is protected by the ASI under its Patna Circle.



plateau and southern India remained outside his jurisdiction. James Burgess, a trained architect was to be subsequently appointed to head the Archaeological Survey of Western India in 1873 with independent charge. Burgess was given a budget of Rs 3,000 per annum for establishment, photography and scaffolding – that included an assistant and one student of the Bombay School of Art. Later, Mr Heath, Executive Engineer for the Conservation of Ancient Buildings in the North Western Provinces, prepared a detailed set of drawings of Agra and Vrindavan. E.W. Smith, appointed Head Draftsman in the North West Provinces and Oudh Circle at a salary of Rs 190 in 1886, made exquisite drawings of the monuments of Jaunpur and Orchha, and Henry Cousens of Ajanta.

A circular dated August 29, 1867 was issued to local governments, "...desiring the submission of lists of all such structures, and a report of the measures, if any, adopted in preserving from time to time all such objects of architectural interest within the limits of the several Presidencies and Provinces". ¹² In

1868, Secretary of State for India Sir Stafford Northcote made a proposal to the government to record the most remarkable of the ancient monuments of the country. The resolution directed, "Whilst the modellers were engaged at work, the Public Works Department subordinate should also be employed in preparing accurate plans and measurements of the entire building. Arrangements could likewise be made for procuring photographs of it from such points of view as may be necessary, and which should be indicated by the Officer superintending the operation". This led to a comprehensive exercise to survey Bengal, Madras and Bombay as well as northern India, taking accurate measurements and photographs of buildings.

By April 1880, Henry Hardy Cole had initiated the exercise of documenting the monuments of Agra, Delhi, Lahore and Amritsar. The work of site measurements and preparation of fair drawings was undertaken by his band of travelling draftsmen. He continued this practice as Curator of Ancient





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A photograph of draftsmen of the Archaeological Survey at a field survey at Taxila, from the Punjab Albums (undivided Punjab before 1947) of the ASI Photo Division. Alexander Cunningham spent three field seasons at Taxila between 1863 and 1879.

Later, in 1913, John Marshall initiated excavations and continued archaeological investigations every autumn and spring field season until 1934.

Taxila, in Rawalpindi District of Punjab in Pakistan, was an important Buddhist centre of learning and was inscribed as a World Heritage Site in 1980.

5 (see also page 2)

A photograph taken at the Qutb Complex in Delhi, by Charles Shepherd, 1870, from the ASI Collections of the British Library. The young Englishman in the picture is most likely Henry Hardy Cole who was supervising the works. Cole described the scene in The Architecture of Ancient Delhi: "The photograph...represents the casting operations at the Kutb in progress. The three moulds under manipulation show the position of the gelatine mould inside the clay wall. That upon the box in the centre of the picture has been cleaned, and is ready for casting from. The other two are being brushed out preparatory to casting. On the left is the plaster of Paris in a bag - the pans in which it is mixed with the water are near to it, and water is being poured out, by the 'Bhisti' or water bearer. into one of them. On the right are the copper pails in which the gelatine is boiled."

The UNESCO World Heritage Site of Qutb Minar and its monuments, dating from the late 12th century onwards, is protected within the ASI Delhi Circle.

Image courtesy Asia, Pacific & Africa Collections, The British Library, London. Monuments, accompanied on tours by a team of draftsmen who had prepared 469 plans, sections and elevations of the sites surveyed within the first year. While many draftsmen continued to be Europeans and military men, the inclusion of "natives" in this massive documentation exercise had gradually begun. Cole credited Thakoor Dass and Habib-oo-lah for preparing pencil drawings. Gholam Rasul Beg prepared drawings of Orchha with E.W. Smith; later, Ghulam Muhammad was to serve as draftsman in the Punjab and North West Provinces.

On December 28, 1886, James Burgess, now Director General of the ASI, wrote to the Government, "it has been my constant practice in the Surveys of Bombay and Madras to employ Native Assistants as far as practicable, and in the Drawing Department especially the results amply show that with proper training Native draftsmen can be taught to do excellent work at very moderate salaries. Had the appointments in Northern India not been filled up before I was consulted in December last, I should have proposed that, as far as practicable, instead of European Assistants and head draftsmen, a large number of Native students from the Government Schools of Art should be encouraged to enter the Survey and be trained as draftsmen. In translating inscriptions I have found Native scholars like Pandit Bhagwanlal Indraji, Ph.D., most useful; and with patient training others might be taught to do very valuable work. In the Survey generally, so far as opportunities permit, I shall be most happy to continue to employ Natives wherever I can secure suitable men." ¹⁵

In 1887, Burgess pleaded with the Comptroller of Indian Treasuries for continuing with a "native" draftsman for the North Western Provinces and Oudh stating, "a native draftsman is indispensable on Dr. Fuhrer's staff". Other Indian draftsmen such as Hari Gopal were credited with preparing measured drawings of monuments in Gujarat under Burgess. ¹⁶ The students of Schools of Art in Bombay and Calcutta, as well as Engineering Colleges of Bengal and Roorkee, became the first generation of trained Indians to contribute to architectural documentation.

The standardization of drawings too was a matter of time and by 1887, the ASI was directed to forego the smaller octavo size in favour of the larger quarto form of Bombay to facilitate the uniform reproduction of drawings.

CASTS AND SCULPTURAL FACSIMILES

Architectural casts as a means of documentation gained favour as they helped avoid the unfortunate removal of sculpture from ancient sites. In 1868, the Government of India proposed to expend a sum

of Rs 52,000 a year for the purpose of obtaining casts and photographs of ancient monuments in Bengal, Bombay, North West and Central Provinces.¹⁷ Students of the Calcutta School of Art prepared casts of temples in Cuttack in 1868, while students at Bombay's Jamsetjee Jeejeebhoy School of Art made plaster casts of Ambernath under the superintendence of Mr Terry. In the same year in Orissa, Indian scholar Babu Rajendralala Mitra was engaged in an archaeological mission to take casts of the monuments of Bhubaneswar¹⁸ for which large quantities of gypsum were imported from Europe.

In response to Sir Stafford Northcote's recommendation of 1867, London's South Kensington Museum (now the Victoria and Albert Museum) applied to the Indian government for casts of the gateway of Sanchi stupa. In 1869, one corporal and two sappers from the Royal Engineers were trained to make casts by means of elastic moulds, piece moulds, clay squeezes and paper moulds. A panel of sculptural carving measuring 737 square feet (68.5 square metres) was cast in 112 pieces and shipped to England. This plaster cast of the eastern gateway of the Sanchi stupa was exhibited in the Reproduction Court at the International Exhibition of 1871.

Lieutenant Henry Hardy Cole (1843–1916) was the eldest son of Sir Henry Cole, Director of the South Kensington Museum. He arrived in India as a young army officer in 1865, and in 1868 he was appointed as Superintendent of the Archaeological Survey of the North West Provinces and the Punjab. He led the team making the Sanchi casts for the Kensington Museum and, in 1870, was in charge of a project to make moulds at Fatehpur Sikri and the Qutb Minar. Cole reported, Fathpur Sikri, near Agra, was my first resting place, where, having started some casting operations at the Palace of the Mogul Emperor Akbar, I left Corporal Jackson to superintend their completion. Without delay I instructed five native moulders, who had been employed as soap-stone carvers and workers of mosaics at Agra, in the casting process. They readily acquired the necessary skill. We then proceeded to set to work at the Kutb near Delhi, where we commenced making a series of facsimiles of the best specimens characteristic of the Hindu and Pathan sculptures, which abound among the ruins of that place. After the natives, who were engaged on the work, had shown themselves capable of carrying it out without the necessity of any direct superintendence and continuous assistance, I devoted a large portion of time to making a careful investigation of the buildings and turned my attention to their history.

PHOTOGRAPHY

With the arrival of photography in India by the mid-19th century, the documentation of its people and places underwent a transformation. Military men were often at the frontier of early architectural

6 (see also page 6)

An I860s photograph of the Ashokan Edict Pillar at Lauriya-Nandangarh, Champaran District, Bihar, by Sir Benjamin Simpson. A horse is seen standing to the right of the Ashokan column with a hint of a carriage wheel visible behind it. The site was visited by Alexander Cunningham and later by John Marshall who was told that the pillar was the walking stick of Bhim (Charles Allen, *Ashoka*, 2012, pp. 17–18).

The monolithic pillar crowned by a lion atop a bell-shaped fluted abacus is a protected ASI monument within its Patna Circle.





The Durga Temple at Aihole, in Bijapur District of northern Karnataka, photographed by Captain Thomas Hesketh Biggs in the 1850s. In 1855, Captain Biggs of the Bombay Artillery was appointed to take photographs of sites in the Bombay Presidency. Aihole occupies a unique place in the history of temple architecture as the experimenting ground for the construction of free-standing temples beyond the realm of rock-cut architecture. The sculptural art of the early Chalukyan period is exemplified in the Durga Temple with its apsidal plan and colonnaded exterior. The Aihole temples are protected by the ASI under its Dharwad Circle.

photography. At the instance of Sir Walter Elliot, Captain L. Tripe of the 51st Regiment was appointed Photographer to the Madras Presidency in the 1850s. His photographs of Madurai, Tanjore, Trichinopoly and Seringham were published in *Photographic Views of Indian Scenery*. In 1855, Captain Thomas Hesketh Biggs of the Bombay Artillery was appointed to take photographs of sites in the Bombay Presidency. In 1857, he was recalled into active service and his work was continued by Dr William Henry Pigou, a surgeon in the Native Infantry Regiment. Biggs later returned to the project and was assisted by Dr Andrew C.B. Neill, a surgeon and amateur photographer from Madras. Pigou, Neill and Biggs' photographs of monuments of Halebid, Belur and Vijayanagara were published in *Architecture in Dharwar & Mysore* by John Murray in 1866, illustrated with 98 photographic plates. Biggs photographed the structures of Ahmedabad for a volume on the architecture of Gujarat, generously funded by "Premchand Ramchund".

Another publication by John Murray entitled *Architecture at Beejapore: An Ancient Mohammedan Capital in the Bombay Presidency* was published the same year containing 76 plates by Colonel Biggs and Major Loch. The first volume of Babu Rajendralala Mitra's *Antiquities of Orissa* appeared as a large quarto, illustrated by 36 lithographed plates.

By the 1850s, amateur photographic societies were active in Bombay, Madras and Calcutta. Bombay's Elphinstone College conducted classes in photography for Indian students from 1855, training a generation of "native" photographers.²⁴ Indian photographers such as Narain Daji (brother of Bhau Daji), Hurrichund Chintamon and Shaporjee Hormusjee were active in Bombay. Dr Hunter, Superintendent of the Government Industrial School at Madras trained students in photography.²⁵

The accounts of the vast destruction wreaked by the First War of Independence of 1857, coupled with radical developments in photography, aroused the curiosity of British audiences. A need was felt to capture the people, tribes and architecture of India through the new medium of photography. This idea found favour with Viceroy and Vicereine Lord and Lady Canning (1856–62), who saw it as a unique opportunity of documenting India during their tenure. Their ambitious undertaking soon outgrew the confines of a private project and became a government exercise, with a band of photographers and officers dispatched to various regions. Copies of each plate were sent to the Secretary of State for India in Council. The negatives remained in India and fresh negatives were produced from the plates to print multiple copies. The project was supervised by Mr W. Griggs at the India Museum in London, and led by John Forbes Watson.²⁶

8

A 19th-century photograph of Govind Mandir at Datia with a vernacular streetscape in the foreground. Photographs of Datia were taken by Lala Deen Dayal for Sir Lepel Griffin's Famous Monuments of Central India, and in 1928 Martin Hurlimann captured an image from almost the same angle as the one seen here.

Govind Mandir in Datia, built by Raja Bir Singh Deo of Orchha in 1614, represents the most iconic of Bundela palaces. Govind Mandir is protected as a State Monument in Madhya Pradesh.





View of the grand gopuras at Kalaiyarkovil Temple by Captain Edmund David Lyon, c. 1870. This belongs to an album of 41 albumen prints by Captain Lyon, who was commissioned by the Madras Government to photograph the sites of southern India which he covered extensively, photographing monuments in present-day Karnataka and Tamil Nadu.

The Kalaiyarkovil (Kaliyarkovl) Temple is a living Shaivite temple in Sivaganga District, Tamil Nadu.

10

An 1893 view of Buland Darwaza, Fatehpur Sikri, with local boys posing in the foreground. The image is attributed to E.W. Smith who was appointed Architectural Assistant in the North West Provinces to assist A. Fuhrer. Smith underrook extensive documentation of Jaunpur, Sahet-Mahet as well as Orchha. He also worked on the monuments of Fatehpur Sikri and Agra and his photographs and drawings appear in Moghul Colour Decoration of Agra published by the Government Press North West Provinces and Oudh in 1901 and The Moghul Architecture of Fathpur Sikri published in 1894–98. Built by Emperor Akbar as a new capital city, Fatehpur Sikri in Uttar Pradesh is a UNESCO World Heritage Site and protected by the ASI.





The monumental *People of India* project enlisted amateur photographers serving in the government as well as some private entrepreneurs. The published volumes listed the works of Lieutenant W.W. Hooper, Major Houghton, Captain H.C. McDonald, Captain Oakes, Lieutenant Reverend G. Richter, Dr B.W. Switzer, Dr B. Simpson and Shepherd & Robertson, among others. While the list of photographers in the printed folio was exclusively European, a footnote mentioned that in some instances names of photographers were not forwarded from India.²⁷ Among these anonymous "native" photographers were Brajo Gopal Bromochary from Calcutta and Hurrichund Chintamon who established one of the earliest photographic firms in Bombay (1858–81).²⁸

In 1866, at the suggestion of the Secretary of State for India, Viceroy Sir John Lawrence passed a resolution encouraging amateur photographers "in the taking of views of architectural buildings". By August 1867, local governments were directed to organize a system for photographing ancient monuments. The Madras Government appointed Captain E.D. Lyon to take a series of photographs to illustrate the ancient architecture of southern India. In the Bombay Presidency, Colonels Sykes and Dyer took photographs of the caves and temples, which were published in a folio volume edited by James Burgess in 1869.²⁹

Initial teething troubles included a shortage of both photographers and resources. In a letter dated July 1868, Major J.F. Tennant, assigned on special duty to photograph the antiquities of Kashmir, pleaded, "I beg to say that I have no means whatever of photographing antiquities, and must, if any such work is to be carried out, have a complete photographic outfit. Moreover, I have no officer to send. I am the only officer of the party, and have only one man who could make these photographs.... Sergent Phillips (the man in question) has now been for several years (three or four) away from his family, and came to India most unwillingly on a distinct promise that he should not be detained."³⁰

In a meeting of the London Photographic Society, a letter was read from Captain Biggs, which was accompanied by four large photographs printed on Marion's positive paper. The letter described the difficulties experienced by photographers in the Bombay Presidency, partly from "the nature of the climate, the foliage never being in repose...and partly from the enormous extra cost of chemicals and their inferiority to English chemicals, the cost being three to four hundred percent higher."³¹

Photographic Societies and Archaeological Societies too contributed to the photographic documentation of Indian monuments. The Archaeological Society of Agra reported, "A party of

II

Photograph of Shikhar Burj Kund in Bundi, Rajasthan, by Gunpatrao Abajee Kale, c. 1900. Rajas and zamindars were patrons of early photography in India and often appointed their own court photographers. Among these were names such as Lala Deen Dayal, Brajo Gopal Bromochary and Abajee Kale. This image from the ASI photo archives in New Delhi is identical to the one in the British Library from an album of views of Bundi in the Collection of the 1st Earl Kitchener of Khartoum and Broome.

While the Shikar Burj Kund is not protected by the ASI, this photograph remains part of its photographic archives. members of the Archaeological Society of Agra visited the ruins of Futtehpoor Seekree. The house of Beerbul was photographed on the outside; and much anxiety was expressed to procure a picture of some of the interior details; but the light was found insufficient for the purpose."32

The Archaeological Survey contributed greatly to the photographic recording of India's monuments. The terms of Cunningham's appointment to the Survey in 1861 allowed him the assistance of a "native" photographer. His appointment letter read "...if something more should be necessary to obtain the services of a native subordinate of the Medical or Public Works Department, competent to take photographic views, it should be given." In 1868, Cole on his tour of Kashmir was accompanied by two Indian draftsmen and John Burke, a photographer from Peshawar. The next year, he was provided



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Panoramic view of Srinagar, by John Burke, 1868. Burke accompanied Henry Hardy Cole on his tour of Kashmir. The photograph is signed by Burke at the bottom corner on the fourth thatched roof from the right. Samuel Bourne shot an almost identical angle of Srinagar in the 1860s as part of an album entitled *Photographs of India and Overland Route* but his photograph shows the lake with a lower water level. Burke's view captures the beauty of Srinagar, with poplar trees reflected in the lake and Hari Parvat, an ASI monument, in the distant background.

View of the Lonar Lake and Temple in Buldhana District, Maharashtra, by an unknown photographer. This view is identical to an earlier photograph of Lonar taken by Robert Gill in the 1860s, from the Allardyce Collection: Album of Views and Portraits in Berar and Hyderabad with the British Library. The Lonar Lake was formed by a meteor crash into basaltic rock in the Pleistocene period and has a mean diameter of 1.2 kilometres, the third largest saltwater lake in the world. Along the lake are Hindu temples from the Yadava period. Various temples and tanks in Lonar are protected within the ASI's Aurangabad Circle.



photographic assistance by Reverend Simpson, Chaplain of Mathura, for documenting Vrindavan, Deeg and Fatehpur Sikri. Fifty-eight photographs by Reverend Simpson were published by the Photographic Department of the Indian Museum using the "autotype process in carbon".³⁴

At the recommendation of James Fergusson, the government purchased 61 negatives, 36 pencil drawings and sketchbooks of Ajanta from Major Robert Gill (who had been sent to Ajanta as a lieutenant and had been subsequently promoted to major) in 1868.³⁵ Four years later, the government requested Gill to submit copies of 29 photographs of the Buldhana and Bassim districts of the Nizam's dominions. The letter dated October 1872, with a copy marked to Cunningham, mentioned that the negatives were the property of the Nizam's government and photographs were at a rate of Rs 25 each.³⁶



An 1890s photograph by Alexander Rea of the Shiva Temple at Tiruvadi (Tiruvadigai), Tamil Nadu. Alexander Rea, as Archaeological Surveyor to the Government of Madras, extensively photographed temples and monuments in south India. In 1891, he compiled the List of Ancient Monuments Selected for Conservation in the Madras Presidency, citing in the preface, how the Government called upon him to prepare "revised lists including only such monuments as are unique, or very ancient, or possess exceptional merit as typical specimens of their type of architecture".

15

The *cbbattris* (cenotaphs) of Orchha along the Betwa River, photographed by E. W. Smith of the ASI in the 1880s.

Orchha, in the Bundelkhand region of Madhya Pradesh was established as the capital of the Bundela kings in 1531. The skyline of the Chhaturbhuj, Ram Raja and Lakshmi Narayan Temples as well as the fourteen cenotaphs of the rulers of Orchha is strikingly beautiful. These monuments are protected by the state government of Madhya Pradesh.





An I880s photograph of Damri Masjid, Ahmednagar by Henry Cousens, an officer of the Archaeological Survey. Cousens extensively covered the areas of present-day Maharashtra, Karnataka, Sindh and Gujarat, signing many photographs with his initials H.C., which he also used in his book Bijapur The Old Capital of the Adil Shahi Kings, Ahmednagar in Maharashtra was the seat of the Nizam Shahi Sultanate that ruled over Ahmednagar and Berar (in Karnataka). The Deccan Sultanates that held sway over southern India between the I4th and I7th centuries included the Bahamanis, Barid Shahis. Adil Shahis, Qutb Shahis and the Nizam Shahis. Damri Masjid is an ASI protected monument within the Aurangabad Circle.

17

An early 20th-century photograph of the Devi Temple in Chamba by Babu Pindi Lal. Pindi Lal took photographs of sites such as Tabo, Leh, Sarahan, Takht-i-Bahi and Bushahr across the Himalayan region. J.Ph. Vogel records in the ASI publication *Antiquities of Indian Tibet* that Dr A.H. Francke's text was illustrated by 45 plates, each with two photographic views by Babu Pindi Lal—"ample evidence of Pindi Lal's excellence as a photographer on the expedition."

The temple, in present-day Himachal Pradesh, is a protected National Monument within ASI's Shimla Circle.



In addition to photographs taken by archaeological officers such as J.D. Beglar, H.H. Cole, E.W. Smith, James Burgess, Henry Bailey, Wade Garrick, Alexander Rea, Henry Cousens and J.Ph. Vogel, Indians employed by the Survey as draftsmen and assistants also contributed to photographic documentation.³⁷ Babu Pindi Lal worked as photographer under John Marshall, and draftsmen Ghulam Nabi and Babu Bhura Mall who reported to Vogel doubled up as photographers. By the end of the 19th century, Theodore Bloch, Superintendent of the Bengal Circle, enumerated 6,000 exposures of glass plates and photographic prints with the Indian Museum, Calcutta and the India Office in London. By this time, thirteen photographers were employed full-time or part-time by the Survey.³⁸

In addition to officers of the Survey, professional photographers such as Charles Shepherd, Nicholas & Co., G.W. Lawrie, O.S. Baudesson, Wiele & Klein, John Johnston, Deen Dayal and Samuel Bourne were also commissioned to take photographs of monuments. Philip Adolphe Klier took photographs of Burma in the 1890s. Cole had earlier reported, "By a previous arrangement Mr. Shepherd, of the firm of Messrs. Shepherd and Bourne, came to the Kutb to take a set of photographs of the most interesting buildings.... Mr. Shepherd's renown as a skilful photographer is almost as widely spread in England as in India...but to meet the special requirements of the illustrations prepared for this volume he changed his visual style and, in concurrence with my suggestions, concentrated his energies in securing most accurate photographs of the architectural features, thereby using his art as a means for scientific reproduction."³⁹

In 1886, James Burgess as Director General of the ASI, recommended a fixed rate for photography. "It is to be borne in mind that Mr. Garrick's travelling expenses are paid by Government, and his time and services belong to them, so that no comparison can be instituted between the prices to be paid to him and those charged by professional photographers. Should he prefer to work by the wet process, Rs. 4 per negative might be allowed; and for prints 4 annas per plate is more than sufficient to cover the expense of paper and chemicals. One print of each plate should be forwarded to me at the close of his field season and from them I would select those negatives which, from the importance of the subject and the apparent quality of the plate, ought to be paid for at the above rates. The negatives would then become the property of Government. If Mr. Garrick is judicious in the selection of subjects and fairly successful as an operator, he may take 25 to 40 plates in a season that would be taken over for Government. Badly selected photographs or inferior negatives ought not to be paid for."

18

Jehangiri Mahal, Agra Fort, by Shepherd & Robertson, 1862. This image in the ASI Photo Section, is identical to that in the British Library's Strachey Collection of Indian Views.

Agra Fort, constructed by Akbar between 1565 and 1573, is a UNESCO World Heritage Site and protected under the Agra Circle of ASI. The architecture of the Jehangiri Mahal blends Islamic and Rajput forms to create a perfect synthesis of the Indo-Islamic style.





19 (see also page 4)

View of the Annamalaiyar Temple Complex at Thiruvannamalai in Tamil Nadu, by Wiele & Klein, the leading photographic studio in south India from the I880s to World War II (later known as Wiele, Klein & Peyerl). The firm ran successful studios in Madras and Ootacamund and advertised themselves as "Artists, Photographers and Photoengravers". Their Madras (now Chennai) studio was located at II Mount Road, where Theodore Klein and his wife lived on the floor above. In World War II, Klein (a German) was declared an enemy citizen and the studio was run by the Custodian of Enemy Property.

20

A 19th-century photograph by Samuel Bourne of the temple of Govind Deo at Brindaban, Mathura District, in Uttar Pradesh. The buildings of Mathura were earlier photographed by Reverend Simpson who accompanied Henry Hardy Cole in 1869. Bourne arrived in India in 1863 and established a partnership with William Howard by the name of Howard & Bourne. In 1865, he set up a studio in partnership with Charles Shepherd in Simla; Bourne & Shepherd became the country's premier photographers, with studios in Calcutta, Bombay and Simla (today Kolkata, Mumbai and Shimla).

The Govind Deo Temple, built by Raja Man Singh of Amber during the reign of Emperor Akbar, is protected by the Agra Circle of ASI.





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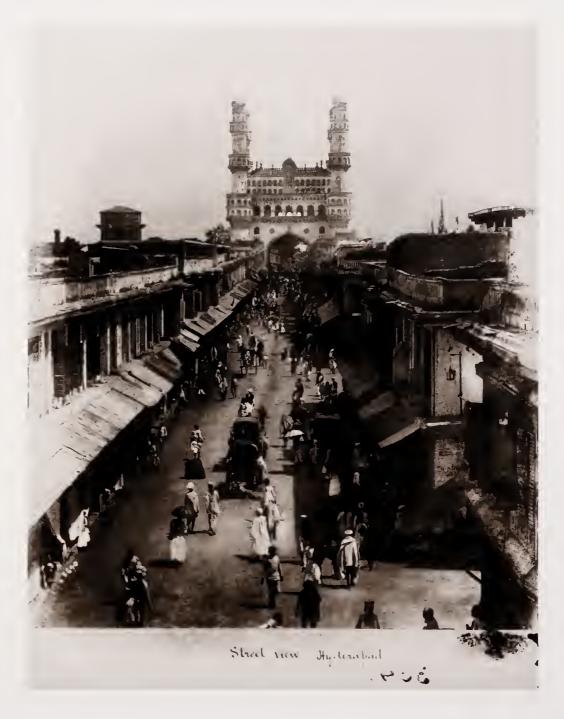
The ancient temple of Wangath in Kashmir, by John Burke, 1868. The photograph is inscribed "Ruins of Wangat, Scind Valley, Baker and Burke", on the trunk of the tree to the left. John Burke, who had accompanied Henry Hardy Cole on his tour of Kashmir, left the army as an assistant apothecary to join the photographic studio of Sergeant William Baker, among the earliest photographic studios in Murree. He was later to establish himself as a "photo artiste" and become a partner at Baker & Burke, operating in the region of Peshawar. Murree, Multan and Lahore.

22

A 19th-century street view of Hyderabad leading to the Charminar, by Lala Deen Dayal. Lala Deen Dayal became court photographer to the Nizam of Hyderabad and set up photographic studios in Secunderabad, Indore and Bombay (now Mumbai).

The Charminar, built to mark the foundation of the city of Hyderabad in 1591, is an ASI monument within its Hyderabad Circle in Andhra Pradesh.

Image courtesy Indira Gandhi National Centre for the Arts (IGNCA), New Delhi.



With developments in photography and the introduction of the cost-effective technique of albumen prints, professional photographers were able to establish commercially viable studios across India by the 1860s. Johnson & Henderson were amongst the earliest studios in the 1850s. Charles Shepherd who had been actively photographing in India since 1858 established the Shepherd & Robertson studio in Agra in 1862. Samuel Bourne arrived in India in 1863 and photographed the Himalayas and Kashmir. He initially established a partnership with William Howard by the name of Howard & Bourne. In 1865, he set up a studio in partnership with Charles Shepherd in Simla. Bourne & Shepherd became the country's premier photographers, their studios covering a vast expanse of India from Calcutta to Simla.

John Burke, who had accompanied Cole on his tour of Kashmir, left the army as an assistant apothecary to join the photographic studio of Sergeant William Baker, among the earliest photographic studios. He was later to establish himself as a "photo artiste" and become a partner at Baker & Burke, operating in the region of Peshawar, Murree, Multan and Lahore. 40 Other partnerships such as Herzog & Higgins, Johnston & Hoffman and Wiele & Klein ran successful studios in the 1890s.

Among Indian photographers of the 19th century, the name of Lala Deen Dayal (1844–1910) remains foremost. Trained at the Thomason's Civil Engineering College at Roorkee, he joined the Department of Public Works at Indore in 1866 as Head Estimator & Draughtsman. In 1876, Deen Dayal was commissioned by Sir Henry Daly, British Agent for Central India, to photograph the visit of the Prince of Wales. He accompanied Sir Lepel Griffin on a tour of Bundelkhand in 1882, and 89 of his photographs of Gwalior, Sanchi and Khajuraho were reproduced in Griffin's *Famous Monuments of Central India*. Later, Raja Deen Dayal became the court photographer of the Nizam of Hyderabad and set up photographic studios in Secunderabad, Indore and Bombay.

By the end of the 19th century, a great number of Indian monuments had been photographed. James Fergusson wrote, "There are now very few buildings in India – of any importance at least – which have not been photographed with more or less completeness; and for purposes of comparison such collections of photographs as are now available are simply invaluable. For detecting similarities, or distinguishing differences between specimens situated at distances from one another, photographs are almost equal to actual personal inspection, and, when sufficiently numerous, afford a picture of Indian art of the utmost importance to anyone attempting to describe it. ...I possess, to give a single instance, more than 3,000 photographs of Indian buildings, with which constant use has made me as familiar

as with any other object that is perpetually before my eyes, and to recapitulate all the information they convey to long-continued scrutiny, would be an endless, if not indeed an impossible undertaking."

NOTES AND REFERENCES

- In May 1601, Lancaster's fleet of four ships sailed for India. Captain Keeling of the third ship docked at Surat in 1607.
- 2 Rennell was succeeded by Colonel John Call who compiled an Atlas of India, a fair copy of which was commissioned for the Council Room in Calcutta in 1787. See Clements R. Markham, *A Memoir on the Indian Survey*, Printed by Order of Her Majesty's Secretary of State for India in Council, London, 1871, 2nd edition 1878.
- 3 Sourindranath Roy, The Story of Indian Archaeology, Archaeological Survey of India, 1961, reprint 1996.
- 4 A Catalogue of The Collection of Engravings and Books of Prints of the Late Thomas Daniell Esq., R.A., and of the highly interesting Drawings and Sketches of Indian Scenes by the Late William Daniell Esq., R.A., London, 1840.
- In June 1836, after years of the Madras section of Mackenzie's manuscripts having remained unutilized, a proposal to continue his research was made by Pandit C. Vencata Luchmiah. The Asiatic Society rejected this on the grounds that they had no faith in Luchmiah's pretensions and recommended Reverend William Taylor instead. See H.H. Wilson, *Mackenzie Collection: A Descriptive Catalogue of the Oriental Manuscripts*, 2nd edition, Calcutta, 1828.
- 6 Upinder Singh, *The Discovery of Ancient India, Early Archaeologists and the Beginning of Archaeology*, New Delhi, 2004, pp. 5–6.
- 7 Printed on the cover of the Archaeological Survey of India Report 1871–72, ASI, New Delhi.
- 8 Alexander Cunningham, Four Reports made during the Years 1862–63, 64–65, Archaeological Survey of India, reprint 2000.
- 9 Col. H. Yule, Memoir of Captain W. Gill, London, 1884.
- 10 See Cunningham, Four Reports made during the Years 1862-63, 64-65.
- 11 Alexander Cunningham, Archaeological Survey of India Report for the Year 1871–72, Vol. III, 1873, reprint, ASI, New Delhi, 2000.
- 12 Proceedings No. 131, Government of India Home Department, February 29, 1868, Conservation of ancient architectural structures or their remains in India, National Archives of India. See Singh, The Discovery of Ancient India.
- 13 Proceedings No. 242/244, Government of India Home Department, Public, January 1876 A., Casts and Photographs of the Temples of Ambernath and Bhoobuneshwar, National Archives of India.
- 14 As Curator of Ancient Monuments, Cole charted a hectic travel schedule. One tour, for example, involved departing from Calcutta in February 1881 to cover the monuments of "Madras, Mahavellipur, Vellore, Trichinopoly, Srirangam, Chillambaram, Congeveram, Bijanagar, Bombay, Bijapur, Poona, Karli, Ambernath, Elephanta, Ahmedabad, Abu, Ajmir, Ulwar, Jaipur, Delhi, returning to Simla by April". See Henry Hardy Cole, *Preservation*

- of National Monuments: First Report of the Curator of Ancient Monuments in India for the Year 1881–82, Government Central Branch Press, Simla, 1882.
- 15 Proceedings of the Home Department, Archaeology & the Conservation of Ancient Monuments, Appointment of Dr. E. Hultzsch as Epigraphist in the Madras Archaeological Survey; Question of Training Natives in Archaeology and Epigraphy, January 1887, National Archives of India.
- 16 Henry Hardy Cole, Illustrations of Buildings near Muttra and Agra showing the Mixed Hindu-Mohomedan Style of Upper India, prepared at the India Museum under the authority of The Secretary of State for India in Council, India Office, London, 1873.
- 17 Proceedings of the Home Department, *Public Archaeology*, No. 131 of February 29, 1868, *Conservation of ancient architectural structures or their remains in India*, National Archives of India.
- 18 Clements R. Markham, *A Memoir on the Indian Survey*, Printed by Order of Her Majesty's Secretary of State for India in Council, London, 1871, 2nd edition 1878, pp. 268, 273.
- 19 Having a museum director for a father, Henry Hardy Cole was to easily slip into his role as the first Curator of Ancient Monuments and wore many hats, preparing early architectural plans for the Viceregal Lodge in Simla, and designing the Royal College of Organists upon his return to England. See *Fifty Years of Public Work of Sir Henry Cole*, London, 1884, edited by H.H. Cole's brother Alan and sister Henrietta.
- 20 Henry Hardy Cole, Lieut. R.E., Late Superintendent of the Archaeological Survey of the North Western Provinces, India, *The Architecture of Ancient Delhi, Especially the Buildings around the Kuth Minar*, London, 1872.
- 21 Markham, A Memoir on the Indian Survey, p. 255.
- 22 Architecture in Dharwar and Mysore, John Murray, London, 1866. Also see John Falconer, "A Passion for Documentation: Architecture and Ethnography", in *India Through the Lens, Photography 1840–1911*, ed. Vidya Dehejia, Washington DC and Ahmedabad, 2006, p. 73.
- 23 See Markham, *A Memoir on the Indian Survey*, p. 258. Possibly this was Premchand Roychand (1831–1906), merchant banker of Bombay who funded the construction of the Library and Clock Tower of Bombay University.
- 24 Falconer, "A Passion for Documentation", p. 73.
- 25 Markham, A Memoir on the Indian Survey, pp. 255-56.
- 26 Forbes Watson wrote, "The great convulsion of 1857–58, while it necessarily retarded for a time all scientific and artistic operations, imparted a new interest to the country which had been the scene of, and to the people who had been the actors in these remarkable events. When, therefore, the pacification of India had been accomplished, the officers of the Indian Services, who had made themselves acquainted with the principles and practice of photography, encouraged and patronized by the Governor-General, went forth, and traversed the land in search of interesting subjects." See *People of India, A Series of Photographic Illustrations of The Races and Tribes of Hindustan*, 8 vols., edited by John Forbes Watson and John William Kaye, India Museum, London, 1868–75.

- 27 Ibid.
- 28 John Falconer, Curator's Note, Image Catalogue, British Library.
- 29 Markham, A Memoir on the Indian Survey, pp. 255, 256, 258.
- 30 Proceedings Nos. 90/91, Government of India Home Department, August 22, 1868, regarding Employment of photographers to photograph antiquities in Kashmir, National Archives of India.
- 31 The Photographic and Fine Art Journal, July 1860, p. 207.
- 32 Transactions of the Archaeological Society of Agra, Delhi Gazette, Agra, 1874, p. 4. At another meeting of the Archaeological Society of Agra held on the night of Saturday, May 16, 1874 at 9:30, G. Grant Esq. exhibited "some very interesting photographs taken by himself of various buildings and antiquities. Among others the temple of Sarnath at Benaras and the Asoka Pillar in the Fort at Allahabad &c., &c."
- 33 See Cunningham, Four Reports made during the Years 1862-63, 64-65.
- 34 Report by Lieutenant H.H. Cole, Superintendent Archaeological Survey, North Western Provinces, for the year 1869-70, dated Camp Sanchi, February 1870, from Henry Hardy Cole, Preservation of National Monuments.
- 35 Markham, A Memoir on the Indian Survey, p. 253.
- 36 Letter from Major W. Tweedie, First Assistant to the British Resident at Hyderabad, October 1872, Proceedings Nos. 484/486, Government of India Home Department Public Archaeology, Photographs of the temples in the Buldhana and Bassim Districts, National Archives of India.
- 37 Cunningham in his Archaeological Report of the 1860s stated that Beglar prepared seventy photographic negatives of temples he visited in Bhuteswar, Erich, Mahoba, Rahat, Danwi, Rahilya, Makarbahi, Khajuraho, Panna, Nagod, Rupnath, Ratagarh, Patahri, Udaypur, Gyarispur, Bhilsa and Sanchi.
- 38 Gerda Theuns de Boer, A Vision of Splendour: Indian Heritage in the Photographs of Jean Philippe Vogel, 1901–1913, Ahmedabad, 2008, pp. 26, 58.
- 39 Cole, Preservation of National Monuments.
- 40 Omar Khan, From Kashmir to Kabul: Photography 1860-1900, Ahmedabad, 2002.
- 41 Gary D. Sampson, "Lala Deen Dayal: Between Two Worlds", in India Through the Lens, Photography 1840-1911, ed. Dehejia, p. 259.
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The First Hundred Years of the ASI

A LTHOUGH RESEARCH AND PUBLICATION ON INDIA'S HISTORY, arts, science and literature began as far back as 1784 with the foundation of the Asiatic Society of Bengal in Calcutta under the initiative of Sir William Jones, an explicit recognition by the British government of the need for research on the monuments and architectural remains of the country began effectively in 1861, when the Archaeological Survey of India was founded, with Alexander Cunningham as Archaeological Surveyor. Cunningham, an army engineer, spearheaded archaeological work in the country. He was already well-known through his antiquarian researches and convinced Lord Canning, then Viceroy of India, of the need to undertake a systematic programme of explorations throughout the country.

In 1862, the objective of the newly constituted ASI was spelt out with a pronounced emphasis on recording "an accurate description – illustrated by plans, measurements, drawings, or photographs and by copies of inscriptions – of such remains as deserve notice with the history of them so far as it may be traceable, and a record of the traditions that are retained regarding them". In 1870, the definition was elaborated to encompass "a complete search over the whole country and a systematic record and description of all architectural and other remains that were remarkable for their antiquity, their beauty or their historical interest".

From November 1861 to January 1865, Cunningham's explorations were mainly confined to the vast tracts of northern and eastern India, based on the accounts of the Chinese pilgrims, Fa-xian and Xuanzang, who travelled through India in the 5th and 7th centuries CE, respectively. During this period, Cunningham made a number of outstanding discoveries, surveyed a large number of monuments and remains in northern and central India and exhaustively reported on them with elaborate illustrations.

Ι

Photograph of Akbar's khwabgah (Khas Mahal) with the Anoop Talao in the foreground, Fatehpur Sikri, Agra Circle. Fatehpur Sikri was surveyed extensively by J.D. Beglar in the 1870s and later by E.W. Smith in 1893. Shepherd & Robertson's views of the 1860s and those by Lala Deen Dayal a few decades later show a remarkable amount of conservation and consolidation work that was taken up in the 19th and early 20th century.



A 19th-century photograph of the North Gateway of Sanchi Stupa I, most probably by Deen Dayal. The Report of the Curator of Ancient Indian Monuments, 1883–84 records, "In supplying missing portions of the gateways that were re-erected, plain stone was used, any reproduction of carvings must have been imaginative and wholly misleading. The sculptures on the northern gateway and gateway of the small tope had been thoroughly cleaned, greatly to their advantage. Each bas-relief has become as sharp and clear as when first chiselled."

Sanchi is today inscribed as a UNESCO World Heritage Site and among the most significant Buddhist sites in the world. Its monuments are protected by the ASI through its Bhopal Circle.

3

Archaeological excavations at Sarnath, Varanasi, Uttar Pradesh, from the ASI's 1907-08 United Provinces Albums, Volume 10. The view shows excavation trenches in the foreground of the Dhamek Stupa. Sarnath is one amongst the four sites most sacred to Buddhists. Lord Buddha preached his first sermon after attaining enlightenment at the Deer Garden here. It is equally sacred to Jains, being associated with the Nirvana of Sreyansanath, the eleventh Tirthankara. In 1798, J. Duncan gave an account of the casket of green marble exposed by the workmen of Jagat Singh, the Dewan of King Chet Singh of Banaras, while dismantling the Dharmarajika Stupa (a pre-Ashokan stupa of which unfortunately only the foundations remain) to exploit building materials. Excavations carried out by the ASI have revealed a number of monasteries, stupas, temples, inscriptions, sculptures and other antiquities ranging in date from the 3rd century BCE to 12th century cE.

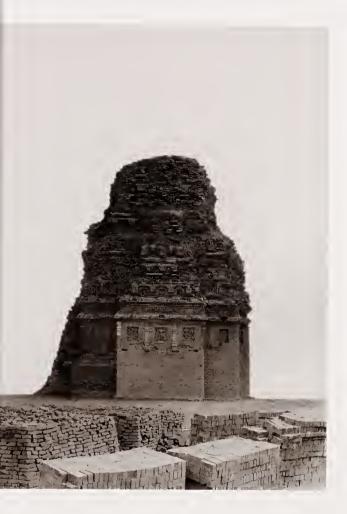
The site of Sarnath, including the Dhamek Stupa, is a National Monument within the Patna Circle of ASI.



View from the northwest of the Sirkap Kunala Stupa at Taxila, showing detail of base mouldings. Officers of the Archaeological Survey pose at the site. The image is from the ASI's Punjab Albums, Volume 22, dated 1914–15, Taxila.

Sirkap was a fortified city founded during the mid-2nd century BCE. The city was destroyed in the 1st century CE by the Kushans of Central Asia. Sirkap (meaning Severed Head) is the second oldest major city of Taxila in Pakistan and was inscribed as a World Heritage Site in 1980.





Photograph by Gulam Nabi, of the ancient terracotta temple at Bhitargaon, from a 1907–08 ASI Album.

Bhitargaon, near Kanpur in Uttar Pradesh, is a protected National Monument under the Lucknow Circle of ASI. The temple, dated to the 6th century, is a surviving specimen of Gupta temple architecture in terracotta.

In spite of these valuable discoveries, the Archaeological Survey of India was abolished in 1866. During the next five years, attention was turned to the photographing of monuments and preparation of casts of architectural pieces. The Secretary of State for India in the imperial government, Lord Argyll, felt the need for more substantial surveys under the guidance of a centralized organization. As a result, the Archaeological Survey of India was revived in February 1871, with Cunningham as its first Director General.

During the fifteen years of his second tenure, Cunningham discovered a large number of monuments and remains, and revisited the old ones, bringing to light coins, inscriptions, sculptures and other antiquities. As he wrote to the government on February 15, 1885: "I have identified the sites of many of the chief cities and most famous places of Ancient India, such as rock of Aornos, the city of Taxila, and the fortress of Sangala, all connected with the history of Alexander the Great. In India I have found the sites of celebrated cities of Sankisa, Sravasti and Kausambi, all intimately connected with the history of Buddha. Amongst other discoveries I may mention the great Stupa of Bharhut, on which most of the principal events of Buddha's life were sculptured and inscribed. I have found three dated inscriptions of King Asoka, and my assistants have brought to light a new pillar of Asoka, and a new text of his rock edicts in Bactrian characters, in which the whole of the 12th edict is complete. I have traced the Gupta style of Architecture in the temples of the Gupta kings at Tigowa, Bilsar, Bhitargaon, Kuthara, and Deogarh, and I have discovered new inscriptions of this powerful dynasty at Eran, Udayagiri and other places."

A major development took place in 1873 when the Government of India issued instructions to the local governments to preserve monuments. It was Viceroy Lord Lytton (1876–80) who realized that the preservation of monuments should be the responsibility of the Supreme Government itself, for he could not conceive of any claims upon the administrative and financial resources of the Supreme Government more essentially "imperial" than this. This resulted in the appointment of H.H. Cole as the Curator of Ancient Monuments in 1881. Cole worked for the next two years very successfully, but the post was abolished in 1883. The responsibility of preservation of monuments devolved on the local governments once again.

In 1883, J.F. Fleet was appointed as the Government Epigraphist for a period of three years, to decipher newly discovered inscriptions. E. Hulzsch was appointed as Epigraphist for South Indian Inscriptions in 1886.

Cunningham retired in 1885 and was succeeded by James Burgess who worked with a different set of priorities. During his tenure, architectural studies were taken up with greater enthusiasm. He could, however, cover only western India. An Archaeological Survey of Western India had been constituted in 1873, to whose charge was added the Archaeological Survey of South India in 1881. The activities of the Director General were decentralized with two local Surveyors in North and East India, Burgess being in direct charge of West and South India.

After the retirement of Burgess in 1889, the government once again decided to abolish the Archaeological Survey of India as a centralized organization. All responsibilities were given to the local governments. There was also an attempt to transfer the work to the Asiatic Society of Bengal; the Society, however, declined the offer. The need for a centralized body came to be accepted in 1898, when the government once again undertook this responsibility and proposed to divide India into five Circles – Bombay with Sind and Berar; Madras and Coorg; Panjab, Baluchistan and Ajmer; Northwestern Provinces and Central Provinces; and Bengal and Assam – for the proper preservation of monuments, each under an Archaeological Surveyor. This scheme was approved for a short period of five years.

Lord Curzon, appointed Viceroy in 1899, took special interest in the organization of the Archaeological Survey and widened the scope of its activities by insisting on the formulation of provisions for excavations, research, epigraphy, publication and the preservation of monuments as well as the establishment of museums. He declared in his speech on *Ancient Buildings in India*, "we are custodians for our own age, of that which has been bequeathed to us by an earlier, and…posterity will rightly blame us if, owing to our neglect, they fail to reap the same advantages that we have been privileged to enjoy".

Curzon further announced: "I hope to assert more definitely during my time the Imperial responsibility of Government in respect of Indian antiquities, to inaugurate or to persuade a more liberal attitude on the part of those with whom it rests to provide the means, and to be a faithful guardian of the priceless treasure-house of art and learning that has, for a few years at any rate, been committed to my charge." He proceeded to give shape to his ideas with a missionary zeal. In 1900, he proposed the revival of the post of Director General for the supervision and coordination of the work of the Archaeological Survey of India, and of grants-in-aid for archaeological work to local governments to the extent of a hundred thousand rupees per year. The British government accepted the proposal, and John Marshall arrived in India in 1902.

Sir John Marshall adopted a holistic approach; he paid equal attention to excavations, maintenance and preservation of monuments, besides the establishment of site museums. As the longest serving Director General (1902–28), he succeeded in putting the Survey's agenda on a solid footing. He overhauled the monuments of Delhi and Agra, carried out fresh excavations at important sites and set up site museums. In 1904 the Ancient Monuments Preservation Act was passed for the acquisition, protection and preservation of monuments and objects of archaeological, historical and artistic interest, and to ensure some amount of discipline in archaeological excavations. Later the Act was amended to include entire sites. Marshall also drafted a *Conservation Manual* for preserving ancient monuments, and initiated a new series of publications titled *Annual Report* to provide a yearly account of the ASI's explorations, excavations, conservation, epigraphy and all other related issues.



Photograph by Brajbasi Friend & Co., Mathura, dated I908, showing horse-drawn carriages and a group of people in front of the Museum at Mathura. The notice board outside the museum declares admission to the museum free, and timings of 7 to I0 am and 4 to 6 pm.

John Marshall stressed the importance of site museums, and today the ASI maintains 44 site museums and a number of sculpture-sheds at sites

across India.

The five Circles, created by the colonial government in 1899 for a period of five years, were retained on a permanent basis at the insistence of Sir John Marshall for "the work of the archaeological officers is a kind which cannot be discharged by any other agency and it can only cease if the government cease to admit their responsibility for the preservation of the ancient remains of the country." In 1906, the Survey was finally put on a permanent footing, with Director General, Government Epigraphist and officers for six Circles – Western Circle: Bombay, Sind, Central India and Rajputana; Southern Circle: Madras and Coorg; Northern Circle: United Provinces, Panjab, Ajmer, Kashmir and Nepal; Eastern Circle: Bengal, Assam, Central Provinces and Berar; Frontier Circle: North West Frontier Province and Baluchistan; and Burma Circle: to cover the rest of India, including Burma but excluding Mysore and Hyderabad, which had their own organization. During Marshall's tenure a separate branch for Arabic and Persian Epigraphy was set up, headed by Dr E.J. Ross.

In 1911, at the Conference of Orientalists held in Simla, the Survey was somewhat criticized for being managed by the British. As a result, in the following year, the government decided to appoint more competent Indians to the Survey. It is important to mention here that in 1921 the government laid down the rule that forty per cent of the service should be in the hands of Europeans, and the remainder executed by Indians.

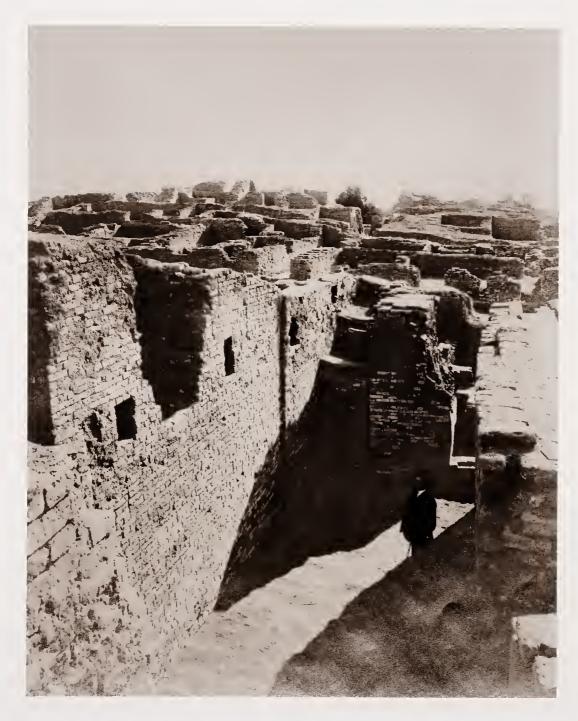
After the ASI had gained permanent footing, with well-defined policies to guide it, the organization continued to work with greater confidence and strength. A large number of monuments and sites were declared protected and brought under the purview of the Ancient Monuments Preservation Act. The Survey also undertook extensive repairs to monuments and excavations. In 1921, Archaeology was listed as a Central subject. Major excavations that were carried out during Marshall's tenure include Pataliputra in Patna, Bhita near Allahabad and Taxila in Rawalpindi district, now in Pakistan. But his period is best remembered for the significant discoveries of the Indus Civilization towns of Harappa (1921) and Mohenjodaro (1922), both today in Pakistan, which pushed back the history of the subcontinent to an as yet unknown past. Meanwhile, between 1925 and 1931 in Baluchistan, pre-Harappan and other settlements were also discovered at Amri, Jhukar, Chanhudaro and other sites.

In 1926 an Excavation Branch was created within the Survey to handle the increased responsibilities. Other excavations during the period included the Buddhist sites of Nalanda, Paharpur and Nagarjunakonda.

7

View of ASI excavations at Nalanda, which continued between the years 1915 and 1936. The Buddhist site of Nalanda, located about 15 kilometres south of Biharsharif and about 95 kilometres southeast of Patna in Bihar, is protected under the Patna Circle of ASI. The history of Nalanda dates back to the time of Buddha in the 6th century BCE, but it rose into prominence in the 5th century as a great monastic and educational centre, attracting students from distant countries, including Xuanzang from China. Nalanda Mahavihara, regarded as one of the greatest universities of the ancient world, was founded by Kumaragupta I (4I3-455 cE) of the Gupta dynasty and continued through the reigns of King Harshavardhana of Kannauj (606-647) and the Pala kings of east India (8th-12th century). The final blow came in the 13th century with the invasion of Bakhtiyar Khalji who destroyed it by fire.





Photograph of excavations at the Indus site of Mohenjodaro, now in Pakistan. This image from the ASI's Mohenjodaro Volumes is marked Block 2, House 4, Room 49. The ASI officer standing in the photograph is Rakhal Das Banerji, who excavated at Mohenjodaro in 1922.

The archaeological ruins of the Indus Civilization at Mohenjodaro, Pakistan, dating back to the beginning of the 3rd millennium BCE, are inscribed as a World Heritage Site.

In October 1928, Marshall was succeeded as Director General by Mr H. Hargreaves who continued the policies and affairs of the Survey in line with his illustrious predecessor who stayed on as Advisor. A notable development during his tenure was the proposal for the substitution of the office of Superintendent for Hindu and Buddhist Monuments at Lahore by an Assistant Superintendent attached to the Frontier Circle, and the re-designation of the Superintendent for Muhammedan and British Monuments, Agra as Superintendent, Northern Circle. These proposals were accepted by the government shortly after Hargreaves' retirement in 1931.

Rai Bahadur Daya Ram Sahni assumed charge as the first Indian Director General of the ASI in July 1931. In spite of his strong desire to take the Survey forward, the worldwide economic depression and the colonial government's apathy resulted in an all-round retrenchment in expenditure and substantive reduction in the workforce (both at the superior and subordinate ranks). The Excavation Branch was done away with and the *Annual Reports* were allowed to fall into arrears until 1935 when an officer was appointed specifically to clear this backlog.

In June 1935, Mr J.F. Blakiston was appointed Director General. During his tenure, important changes were made in the Ancient Monuments Preservation Act. An amendment was made to induce outsiders to undertake excavations in India. As a result of this, the American School of India and Iranian Studies and the Boston Museum of Fine Arts sent out an expedition to India in 1935 to excavate Chanhudaro in Sindh. An important political development was the separation of Burma which had hitherto been administered like other Indian Presidencies, leading to the archaeological organization of that country becoming independent of the ASI.

In March 1937, Rao Bahadur K.N. Dikshit assumed charge of the Director General's office, at a time when the country's economic outlook was gradually improving. He sent a newly constituted exploration party to Sindh but it ended in the tragic death of its leader N.G. Majumdar, one of India's finest archaeologists, who had discovered many new sites in the region, including Chanhudaro, Amri, Ali Murad, Lohri and Pandi Wahi among others. Dikshit organized the first Indian team to explore the prehistory of the Sabarmati valley in Gujarat. He revived links with provincial museums and departments of archaeology of the Indian states. Encouraged by him, the University of Calcutta excavated the ancient site of Bangarh in the district of Dinajpur (now in Bangladesh) and thus became the first Indian university to take up archaeological excavation.



Photograph of Badshahi Mosque, Lahore, on the festival of Id ul Fitr, 1932. This view of the massive congregation to offer namaz at the Mughal Badshahi Mosque is taken from Hazuri Bagh Gate. The imperial mosque of Lahore was built by Emperor Aurangzeb between 1671 and 1673. The largest mosque of its time, the immense scale of its construction rivalled the Jami Masjid in Shahjahanabad. The mosque is on Pakistan's Tentative List for inclusion as a World Heritage Site.

10

Photograph of repairs to the shrine of Shams-i-Tabrizi in Multan, dated 1922–23, from the ASI's Punjab Albums, Volume 30. The site is now in Pakistan. The photograph shows workmen on the scaffolding, carrying out repairs to the dome of the tomb of the medieval Sufi Shams-i-Tabrizi, spiritual guide and mentor to Rumi.



Π

Photograph taken in 1906 of the Maha Aung Mye Bonzan Monastery in Burma (Myanmar), showing the monumental masonry construction with tiered roofs dating from 1818 and built by King Bagyidaw's principal Queen, Nanmadaw Me Nu. This brick and stucco monastery is one of the finest specimens of Burmese architecture from the Konbaung period, In 1906, the Survey was put on a permanent footing, with Director General, Government Epigraphist and officers for six Circles to cover all of India, including Burma.





Photograph of a terracotta frieze, Rajshahi, Paharpur.

Paharpur is a small village 5 kilometres west of

Jamalganj in the Greater Rajshahi District of Bangladesh.

King Dharma Pal established a Buddhist monastery at

Paharpur in the 7th century. It was declared a protected

site in 1919 and was under the custody of the ASI until
the Partition of India in 1947.

The effects of World War II were felt on the activities of the Survey during the last years of Dikshit's tenure. There were no additions to the list of protected monuments and the printing of archaeological publications came to a standstill. A significant event at this time was the Government's appointment of Sir Leonard Woolley (the archaeologist of Ur, Mesopotamia fame) in November 1938, to review the performance of the Archaeological Survey of India. His report was submitted in February 1939 and the review widely presented a dismal picture of the Survey's activities except for the conservation work of extant monuments. Based on these recommendations, K.N. Dikshit undertook the excavation of Ahichchhatra (District Bareilly, United Provinces, presently Uttar Pradesh) between 1940 and 1944.

In 1944, the government appointed Sir Mortimer Wheeler as Director General. Wheeler introduced some wide-ranging changes to the Survey's overall functioning. Soon after his arrival, he re-constituted the Excavation Branch within the Survey. He excavated Taxila, Brahmagiri and Arikamedu to obtain an exact chronological time-frame of Indian history besides establishing a clear cultural sequence. He introduced the scientific stratigraphic method of excavation in India. In 1945, the Survey was reorganized and Wheeler centralized the conservation work of all Circles. The reorganization scheme also included the addition of the much-needed post of a prehistorian, and the establishment of a Museum Branch in the Survey along with the upgrading of the post of Curator, Central Antiquities Museum, to that of Assistant Superintendent. Other additional posts were those of Assistant Archaeological Chemist and Assistant Superintendent for Muslim Epigraphy. The post of Joint Director General was created towards the close of 1945 and that of Superintendent for Publication in 1946. In 1947, a Southeastern Circle with its headquarters at Madras was constituted, and the posts of Garden Superintendent and Assistant Garden Superintendent were sanctioned. To impart training on excavation techniques, Wheeler also set up the School of Archaeology at Taxila to train young archaeologists from the ASI.

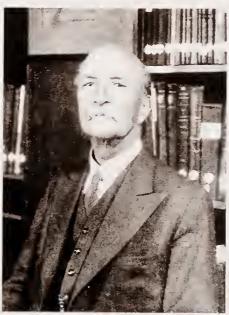
For the purpose of reviewing and advising the Central Government on the needs of archaeology in India, current and future, and "to act as an intermediary between the archaeological services, the world of learning, the administration and, in some small degree, the wider public", the government established a Central Advisory Board of Archaeology in 1945, consisting of representatives of universities, learned societies and state governments.

As a result of the Partition of India, almost all the important Harappan sites including Harappa, Mohenjodaro, Amri and Kotdiji as well as the early historical sites of Taxila, Charsada, Takht-i-Bahi and Sahri-Bahlol went to the newly formed Pakistan. On the administrative side, the Frontier Circle









John Marshall was Director General of the ASI from 1902 to 1928, and Advisor for some years after. He formulated long-term policies and principles for excavation, conservation and museums, and wrote *The Conservation Manual* which has guided ASI policies for nearly a century. During Marshall's tenure, the ASI conducted extensive excavations at Mohenjodaro, Harappa and Taxila, and surveys of Sindh and Baluchistan.

14

Marc Aurel Stein's (1862–1943) best known contribution to the Survey is his exploration of Chinese Turkestan and other parts of Central Asia. Between 1900 and 1916, Stein carried out expeditions in Central Asia; among these were some of the first archaeological surveys of Iran and Iraq. He pioneered the use of aerial photography in archaeology.

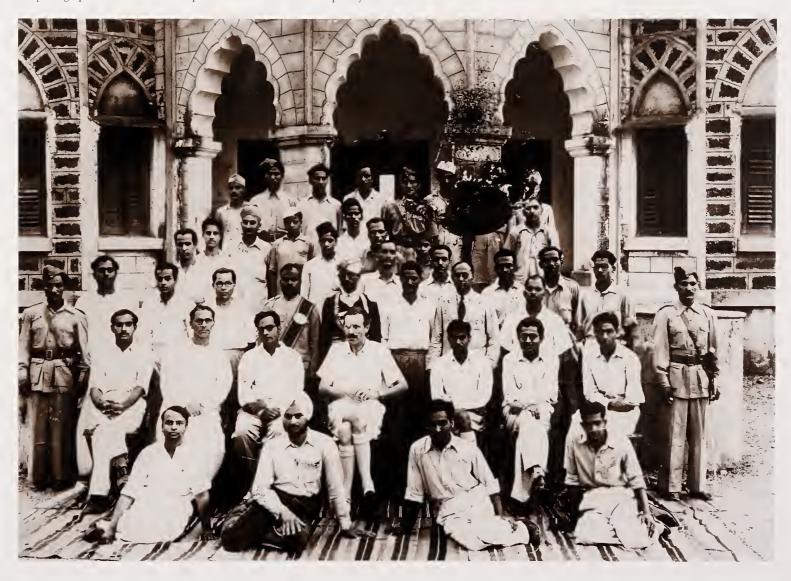
15

Rakhal Das Banerji (1885–1930) is best known as the discoverer of Mohenjodaro. In 1910, Banerji started his career with the Indian Museum in Calcutta as an Assistant to the Archaeological Section. The next year, he joined the Archaeological Survey of India as Assistant Superintendent, He eventually rose to the position of Superintending Archaeologist of the Western Circle in 1917. In 1924, he undertook excavations at Paharpur with the Eastern Circle.

I 6

Jean Philippe Vogel (1872–1958), a Dutch archaeologist and Sankritist, arrived at Lahore in 1901. He was inducted into the Archaeological Survey of India as an Archaeological Surveyor in the Punjab, Baluchistan and Ajmer Circle, Vogel excavated major sites such as Charsada, Kusinara and Sahet-Mahet. In 1910, he rose to the position of Deputy Director General. He left the ASI in 1914 to take up a professorship in Sanskrit at Leiden University. In 1924, along with Nicolaas Krom, he founded the Kern Institute in Leiden. (Ref: *IIAS Newsletter* Summer 2008.)

Group photograph showing a batch of ASI officers and young archaeologists at Sisupalgarh, Orissa. At the centre of the group seated in the second row (wearing shorts) is Mortimer Wheeler, Director General ASI. Wheeler held this post from 1944 to 1948 and trained a generation of archaeologists in the ASI. Many of the young archaeologists in the photograph were to reach senior positions in the ASI in subsequent years.





Group photograph of officers and staff of the Archaeological Survey of India at Poona (Pune) from the Bombay Volumes 1949–50 with the Director General N.P. Chakravarti seated in the centre and garlanded. To his right is seated M.N. Deshpande, who was to rise to the position of Director General in 1972.

On March 21, 1937, Rao Bahadur K.N. Dikshit assumed charge as ASI Director General. Sir Leonard Woolley was appointed in his tenure to report on matters relating to future excavations. He submitted his report in 1939. One of the items that Woolley was to report on, was the most promising sites or areas for explorations. Accordingly, excavations were undertaken at Ahichchhatra during 1940–44 under the direction of Dikshit, who also organized the first Indian prehistoric party to explore the Sabarmati valley of Gujarat.

20

Madho Sarup Vats was appointed as Director General on April 30, 1950. He prepared exhaustive notes on the conservation of the monuments of national importance, a large number of which had suffered age-long neglect, so that they could be saved from decay and brought back to a sound state of preservation. Vats retired on March 3, 1953.

21

Amalananda Ghosh joined the Archaeological Survey of India in 1937 and eventually rose to become its Director General. During his tenure from 1953 to 1968, the landmark Centenary of the Archaeological Survey of India was observed in 1961. He authored and edited a number of publications over the span of his career, including *The Encyclopedia of Indian Archaeology, A Survey of the Recent Progress in Early Indian Archaeology, The City in Early Historical India* and A Guide to Nalanda.

22

Braj Basi Lal, better known as B.B. Lal, was Director General of the Archaeological Survey of India from 1968 to 1972. He received the Padma Bhushan in 2000. Dr Lal worked on excavations under Mortimer Wheeler at sites such as Taxila and Harappa, and other historical sites such as Sisupalgarh in Orissa. During 1950–52 he worked on the archaeology of Mahabharata sites, including Hastinapura, the capital city of the Kurus, as well as on the Mesolithic site of Birbhanpur, West Bengal and the Harappan site of Kalibangan, Rajasthan.











Photograph of the Buddhist monastic complex at Takht-i-Bahi, now in Pakistan, general view from the southwest. This image by Babu Pindi Lal is among the many sites along the Himalaya documented by him as photographer in the ASI.

The Buddhist ruins of Takht-i-Bahi and the neighbouring city remains of Sahr-i-Bahlol are a UNESCO World Heritage Site in Pakistan. This site, dating to the 1st century BCE, is about 80 kilometres from Peshawar and consists of a group of stupas, a monastic complex, a temple complex and a monastery.

based at Lahore was detached from India and thus the eastern part of Punjab was combined with Delhi. In the same manner, East Bengal was separated from the Eastern Circle based at Calcutta. The year also saw the initiation of the bulletin *Ancient India* that contained research papers and detailed reports on excavations.

In 1948, after Wheeler's exit, Dr N.P. Chakravarti took over as Director General. It was during Chakravarti's tenure that the National Museum of India in New Delhi came into being. Chakravarti relinquished office on April 30, 1950 and Madho Sarup Vats became the Director General. Vats prepared exhaustive notes on the conservation of monuments of national importance. In a significant move in 1951, the Parliament passed the Ancient and Historical Monuments and Archaeological Sites and Remains Act.

Consequent upon Vats' retirement in March 1953, Amalananda Ghosh took over as Director General and remained in office till 1968. Ghosh initiated the process of modernization of the Archaeological Survey of India in the post-Independence era. During his tenure of one and a half decades, Ghosh formulated a clear policy for excavations-explorations, conservation and landscaping. He streamlined publications and launched an annual publication entitled *Indian Archaeology – A Review* to provide information on ongoing archaeological projects conducted by the ASI, state governments, universities and research institutions. The ASI's centenary celebrations organized under the leadership of Ghosh, turned out to be a major forum for interaction among archaeologists from across Asia. In many ways, the Survey is still working within the standards and methods formulated by Ghosh during his stint as leader of the organization.

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Revealing India's Past: Excavations and Epigraphy, Museums and Monuments

In the MID-19TH CENTURY INDIAN ARCHAEOLOGY under its first Director General Alexander Cunningham gradually started freeing itself from antiquarianism and moved towards scientific methodology. The ASI's most important excavations were at Sarnath, Sankisa, Sahet-Mahet (Sravasti), Kushinagar, Mathura, Ahichchhatra, Bodhgaya and Taxila, besides surveys of a large number of sites. It was during this time that Robert Bruce Foote with the Geological Survey of India discovered the first palaeolith sites in Pallavaram. Cunningham's successor James Burgess promoted epigraphical researches and studies of art and architecture while J.F. Fleet, George Buhler, E. Hulzsch and other epigraphists made valuable contributions on Sanskrit, Prakrit and Dravidian inscriptions.

With the appointment of John Marshall as Director General in 1902, scientific methods were further established for field investigations. Marshall's first excavation was at Charsada, the ancient site of Pushkalavati, where he was assisted by J.Ph. Vogel. This was followed by excavations at Sarnath, Kushinagar, Rajgir, Basarh, Lauriya-Nandangarh – all associated with Buddhism. Aurel Stein took up explorations on the fringes of Taklamakan desert in 1900 and discovered thousands of inscriptions, Kharoshthi documents and antiquities in Central Asia and Chinese Turkestan.

John Marshall initiated excavations at the ancient sites of Nalanda, Vaishali, Pataliputra, Bhita and Taxila. He was assisted by eminent archaeologists like Henry Cousens, Alexander Rea, T. Bloch, J.Ph. Vogel, Taw Sein Ko, D.R. Bhandarkar, Aurel Stein, D.R. Sahni, K.N. Dikshit, M.S. Vats, Sten Konow, A.H. Longhurst, D.B. Spooner, R.D. Banerji, N.G. Majumdar, Hirananda Sastri, R.P. Chanda and others. Marshall's excavations at Taxila from 1913 to 1934 brought to light three cities and associated Buddhist remains. The discoveries of Harappa and Mohenjodaro in 1921 were the landmark achievements of his tenure and the sites excavated in the following years brought about a change in

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View of the west wall of a large house in Sirkap, Taxila, from the ASI's Punjab Albums, Volume 39 undivided Punjab before 1947). 1926–27. Alexander Cunningham spent three field seasons at Taxila between 1863 and 1879. Later, John Marshall initiated excavations in 1913 and continued archaeological investigations in every autumn and spring field season for the next 22 years until 1934.

Taxila, in Rawalpindi District of Pakistan was an important Buddhist centre of learning and was inscribed as a World Heritage Site in 1980.

View from the northwest of the Dhamek Stupa at Sarnath, showing excavations of an Ashokan Column. Cunningham wrote in his reports of the 1860s, "In the great Buddhist establishment near Banaras, which is described by Hwen Thsang, the principal statue enshrined in a temple 200 feet in height was a copper figure of Buddha represented in the act of turning the wheel of the law. I found numerous statues of Buddha in the same attitude during my explorations about Sarnath in 1835–36, and Major Kittoe discovered several more in 1851–52."





7

The Ashokan Lion Capital at Sarnath, Uttar Pradesh. This image is from *Tiews of Benares: Presented by the Maharaja of Benares*, by Madho Prasad, 1905, in the Collection of the Ist Earl Kitchener of Khartoum and Broome, at the British Library. The site of Buddha's first Dhammachakra Sermon, Sarnath is among the most sacred of Buddhist sites and a National Monument within the Patna Circle of the ASI. The Lion Capital with four lions atop an abacus is the national emblem of India, and the wheel has been incorporated into the National Flag. Image courtesy The British Library, London.

A 19th-century group photograph at an excavation site (the figure to the extreme left is Joseph David Beglar), from the ASI's United Provinces Albums. In the mid-19th century, Indian archaeology gradually started freeing itself from antiquarianism and moved towards scientific methodology. The ASI's most important excavations were at Sarnath, Sankisa, Sahet-Mahet (Sravasti), Kushinagar, Mathura, Ahichchhatra, Bodhgaya and Taxila, besides surveys of a large number of sites.





Excavations at the ancient Buddhist site of Nalanda in Bihar — a general view from the northwest of Monastery 6 and courtyard. Image from the ASI's Bihar and Orissa Albums, Volume 10, 1924—26. Excavations conducted by the ASI during 1915—37 and 1974—82 have exposed extensive remains of six major brick temples and eleven monasteries arranged on a systematic layout and spread over an area of more than a square kilometre. The site is protected under the Patna Circle of ASI.

6

Photograph showing the removal of a skeleton excavated at Harappa, from the Harappa Volume 1946—47, ASI Photo Section.

This Indus site, now in Pakistan, consists of a series of low archaeological mounds and cemeteries to the south of a dry bed of the river Ravi. The archaeological sequence at the site of Harappa is over 13 metres deep, spanning the period between the 4th and 2nd millennia BCE.



perception of Indic civilization which was suddenly pushed back to the 3rd millennium BCE. (After the partition of India in 1947, Harappan sites on both sides of the border were excavated by eminent archaeologists of the subcontinent.) Marshall also established a number of site museums throughout the country.

R.E. Mortimer Wheeler, who was Director General of the ASI during 1944–48, introduced advanced techniques in archaeology and an understanding of the stratigraphical context, strengthening the field of archaeology by training young archaeologists and conducting excavations at Harappa, Arikamedu and Brahmagiri. In the post-Independence era up to 1961, important sites in the country excavated by the ASI include Ropar, Rangpur, Maski, Rajgir Jagatgram, Salihundam, Bara, Lothal, Delhi's Purana



Mortimer Wheeler with a group of students of archaeology at Taxila (now in Pakistan), from the Taxila Volume 37 dated 1944–45, ASI Photo Section. Mortimer Wheeler was Director General of the ASI from 1944 to 1948. He introduced advanced techniques in archaeology and an understanding of the stratigraphical context, strengthening the field of archaeology by training young archaeologists.



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Photograph of an archaeologist cleaning skeletal remains at the ancient Indus site of Lothal, Gujarat. By the end of 1956, the excavations at Lothal had made sufficient progress to throw light on town planning, but there was no clue to the funerary methods adopted by the Lothal people. It was therefore decided to tackle this problem also by probing the northwest corner of the mound. The efforts made in this direction met with success at the end of the season when two burials were discovered. In the subsequent years, the cemetery area was thoroughly examined and the available burials were exposed.

The site of Lothal is protected by the Vadodara Circle of ASI.

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This image of the Arikamedu pavement and drain complex, from the ASI's Arikamedu Albums, dated 1945–46, shows two periods of occupation. Mortimer Wheeler excavated this ancient site with the objective of identifying the remains of maritime contacts between ancient India and Rome. Arikamedu emerged as a trading colony between Romans and Indians and bears unique testimony to the trading settlements of the early historic period. It enjoys the distinction of being the first site in India to provide evidence, through archaeological digs, of the export of a variety of Indian objects such as glass beads, shell and terracotta objects, besides muslin. Arikamedu is located 3 kilometres south of Pondicherry and is a protected site within the Chennai Circle of ASI.





Photograph of Nagarjunakonda from the ASI's Madras Albums, Volume 46, dated 1938-39. The ancient site of Nagarjunakonda in Guntur District of Andhra Pradesh is protected within the Hyderabad Circle of the ASI. Nagarjunakonda, meaning the hill of Nagarjuna, was named after the Buddhist scholar and savant Acharya Nagarjuna, and was the site of an extensive Buddhist establishment nourishing several sects of Buddhism that culminated into the full-fledged Mahayana pantheon. Nagarjunakonda was a great religious centre promoting both Brahmanical and Buddhist faiths, moulding the early phases of art and architecture affiliated with them. Today, it is a unique island housing an archaeological museum with monuments transplanted and reconstructed from the Nagarjunakonda valley before it was submerged as a result of the Nagarjunasagar dam project.

Qila, Lal Kot and Qila Rai Pithora, Mathura, Kumrahar, Nagarjunakonda, Nagda, Ujjain, Kannauj, Kunnattur, Ratnagiri, Bahurupa and Sawalda.

Archaeological Studies and Training

The ASI played a pivotal role in creating an understanding of the development of Indian cultures though its explorations and excavations at important sites, while scholars from within and outside the organization added substantially new evidence to solve archaeological riddles through research and publication. Two major journals were started during the last 50 years and accommodated interpretative investigations. *Ancient India* published by the ASI remained the leading journal on Indian archaeological studies till its 22nd issue in 1973, after which it was discontinued; it has been revived in 2011 under a new series. After 1961, only seven volumes of *Ancient India* were published till 1973, and the focus gradually shifted to the series *Indian Archaeology – A Review* which reported briefly on archaeological works undertaken by ASI and other institutions.

Under the Director Generalship of A. Ghosh, the ASI celebrated its centenary in 1961 and organized the International Conference on Asian Archaeology in New Delhi.¹ The objective was to provide a forum that would bring together distinguished scholars working on Asian archaeology. The response was most encouraging and resulted in collaborative projects in the coming years.

Amongst the publications of the ASI, six monographs on Indian temple architecture have been published since 1964 as part of a series titled *Architectural Survey*. During the last 50 years ASI has published 28 volumes under the *Memoirs of the ASI (MASI)* series, several being excavation reports. Out of 65 guidebooks for visitors to protected monuments, 55 were published during the last 50 years. Some special publications have also been brought out during this period.

In order to develop archaeology as a general discipline and to address the need to train young Indian students in the field, it was decided to introduce archaeology in Indian universities with provision for field training. With the support of the University Grants Commission and the provision of matching grants to universities by the ASI, this was accomplished during the last 50 years. As a result, archaeological research in India has ceased to be a purely governmental activity and has opened up to a wider spectrum with the involvement of universities and academic institutions in fieldwork. Such institutions are closely monitored by the ASI as per the provisions of the Ancient Monuments, Archaeological Sites and Remains Act 1958. Through its Standing Committee, the Central Advisory

Board of Archaeology continues to advise the ASI in the consideration and grant of permissions for exploration and excavation projects. The results of the new initiatives were astounding. The ASI also established the School of Archaeology in 1959 and its first batch of trained archaeologists graduated in 1961. The School provided entry not only to graduates from Indian universities, but also to those from some neighbouring countries, who later distinguished themselves in the field and reached top positions in their home organizations. The School has trained hundreds of professionals in archaeological disciplines over the last 50 years and has now been transformed into the Institute of Archaeology.

PREHISTORIC SITES

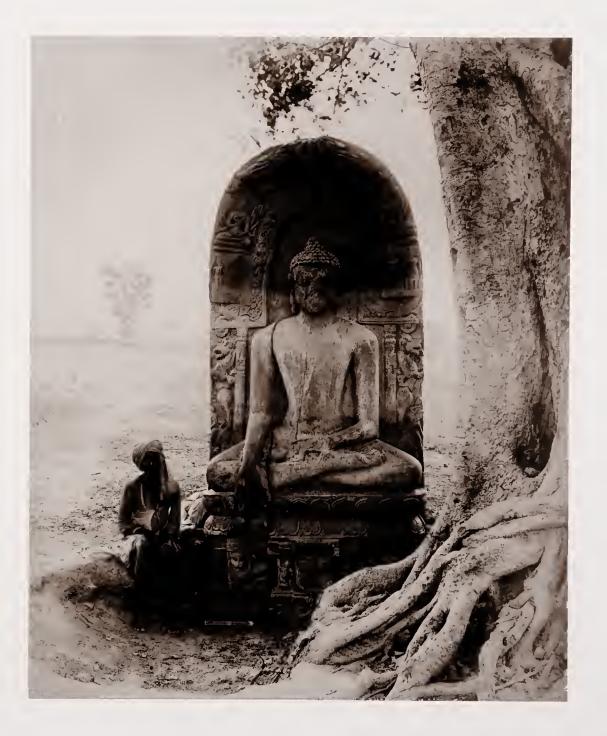
Prehistoric studies have benefited greatly from archaeological investigations carried out by individual scholars and universities besides the ASI. An independent Prehistory Branch was set up by the ASI in 1958 with its headquarters at Nagpur, and the last 50 years have seen many important research projects carried out by the Branch. A significant achievement of the Branch was the discovery of a neolithic phase without pottery at Gufkral, District Pulwama in Jammu & Kashmir. Explorations were also carried out in the Upper Indus valley of Ladakh with the discovery of stone age sites there. Explorations were carried out in Jhansi and Mirzapur districts of Uttar Pradesh which yielded prehistoric rock shelters. Systematic exploration and documentation of prehistoric rock paintings was done in Madhya Pradesh and Odisha (Orissa). The Branch was also credited with the discovery of an Ashokan inscription and stupa at the Saru Maru hills at Panguraria in the Hoshangabad district of Madhya Pradesh.

Major excavations were conducted at Bhimbetka, Adamgarh, Hirapur, Pipri, Utawad, Navakheri and Khaparkhera in Madhya Pradesh. The Branch also undertook explorations of the proposed submergence area of the Sardar Sarovar Dam Project and the Narmada Sagar Dam Project in Madhya Pradesh. Excavations were carried out in the northeastern states at Sekta in Manipur, and Vadagokugiri and Pyntherlangtein in Meghalaya, and a neolithic celt was reported from stratified deposit from Pyntherlangtein. Extensive explorations were carried out in the Vidarbha, Khandesh and Konkan regions of Maharashtra. The Branch excavated at prehistoric sites like Bahurupa, Sawalda, Pachad, Hathkhamba, Yesar and Papamiyan-ki-Tekdi, all in Maharashtra, and Kachargarh in Chhattisgarh. Excavations were conducted at Ladyura in District Almora, Uttarakhand.

Investigations were also carried out at the prehistoric sites of Battavallam, Attirampakkam, Gudiyam, Paiyampalli and Poondi in Tamil Nadu, Billasurgam (Andhra Pradesh), Balwara (Madhya Pradesh),

II

Colossal statue of a seated Buddha at Kasia, Kushinagar district, photographed possibly by Ghulam Nabi, 1911. A local resident is seated next to the statue, in addition to the scale placed at its base, a common method followed in photographic documentation to provide a sense of scale. The figure of Buddha makes the *bhumisparsha mudra* or earth-touching gesture. Kushinagar, where Buddha attained Parinirvana, was identified by Alexander Cunningham as Kasia and partially excavated by A.C.L. Carlleyle in 1876. Later ASI excavations were undertaken between 1904 and 1912 during the time of John Marshall. Marshall's first excavation was at Charsada, where he was assisted by J.Ph. Vogel. This was followed by excavations at Sarnath, Kushinagar, Rajgir, Basarh and Lauriya-Nandangarh – all associated with Buddhism.



Anangpur (Haryana), the Burzahom, Kanispur and Malpur (Jammu & Kashmir), Lalitpur (Uttar Pradesh), Banahalli (Karnataka), Mithakhari V (S. Andaman), Chechar Kutubpur (Bihar) and Golbai Sasan (Odisha).

Publications on new trends in floral, faunal and skeletal analyses and in the understanding of prehistoric settlement and subsistence systems crystallized during the 1970s. The ASI continued its focus on Harappan studies during this period and excavations were undertaken at some of the most significant Harappan sites. These include Kalibangan, Chak 86, Tarkhanewaladera and Baror in Rajasthan, Desalpur, Malvan, Surkotada, Dholavira, Junikuran and Kherasra in Gujarat, Bhagwanpura, Banawali and Bhirrana in Haryana, Manda in Jammu & Kashmir, Kathpalon and Nagar Dhaderi in Punjab,



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Photograph of the Harappan site of Dholavira from the 1990s.

The ancient site Dholavira (also known as Kotada), within the Vadodara Circle of ASI in Gujarat, was discovered in the 1960s and excavations have been carried out since the 1990s by the ASI, revealing the fifth largest urban centre of the Indus or Harappan Culture. The remains consist of a series of mounds, located between two rainwater channels — the Manhar and the Mansar — over an area of more than 100 hectares. This ancient city was a multidivisional settlement consisting of a citadel (castle and bailey), a middle town, a lower town, a large stadium, a small stadium and a series of reservoirs surrounding them. All these were set within an outer fortification in the shape of a parallelogram.

and Sanauli and Hulas in Uttar Pradesh. Excavations at Bhirrana were remarkable as they placed the beginning of culture at the site around the 6th millennium BCE through Carbon-14 determinations, more or less on a par with similar developments in the Baluchistan area, particularly at Mehrgarh.

During the last 50 years a very large number of neo-chalcolithic, chalcolithic and megalithic sites have been discovered, explored and some excavated. The prominent excavated sites with neolithic-chalcolithic traits include Kesarapalli and Ramapuran in Andhra Pradesh, Nagal in Gujarat, Kuchai in Odisha, Ambkheri, Bargaon, Khalana, Kaseri, Pariar and Erich in Uttar Pradesh, Mahisdal, Nanur, Haraipur, Tulsipur and Bharatpur in West Bengal, Paiyampalli in Tamil Nadu, Theur, Daimabad and Tuljapur Garhi in Maharashtra, Banahalli and Kurgodu in Karnataka, Pipri and Utawad in Madhya Pradesh and Ojiyana in Rajasthan.

Excavations at certain megalithic sites in central India, Deccan and south India were also undertaken by the ASI during this period: Junapani (Maharashtra), Hunur (Karnataka), Sittanavasal, Kallupatti, Mothur, Kambarmedu (Tamil Nadu), Auroville in Pondicherry, Cheramangad (Kerala), Karkabhat and Sorar (Madhya Pradesh) and Ladyura (Uttar Pradesh, now in Uttarakhand).

THE HISTORICAL PERIOD

The beginning of the historical period in India was generally placed around 600 BCE, a time which witnessed the emergence of two great historical figures, Buddha and Mahavira, and when it was believed that writing had developed, urbanization began and the economy was consolidated with increase in trade and commerce. However, gradually scholars began to give new thought to the issue relating to the beginning of the historical period: "It is highly likely that this date may go back further into antiquity if the events recorded in our epics and Puranas can be corroborated by archaeological evidence. This is now in the range of possibility because it is generally agreed that the PGW [Painted Grey Ware] culture, which can be dated between 1200 BCE and 600 BCE, probably represents the Culture of MB [Mahabharata] period." The association of PGW with the Mahabharata is suggested on the evidence of excavations at Hastinapur and Kausambi.

Archaeological investigations at the ancient city sites in the northern part of the subcontinent indicated early settlements reaching back, in several cases, to the 2nd millennium BCE. Most of them could be identified with the city sites mentioned in the later Vedic Sanskrit literature of *Aranyakas* and *Brahmanas* and in the early Pali and Prakrit Buddhist and Jain texts, in the context of sixteen great

states (shodasha mahajanapada). These early settlements of the 2nd millennium BCE became significant urban centres by the beginning of the 1st millennium BCE, much before the time of the compilation of Buddhist and Jain texts. These prominent city sites became the capitals of the mahajanapadas. The process of development of the janapadas and mahajanapadas continued in the early historical age when finally they were merged and unified under the Magadha empire around the 4th century BCE. Valuable data is provided by the evidence of settlements at sites in each of the sixteen mahajanapadas reaching back to the 2nd millennium BCE. We may cite excavations at Sarai Khola (Taxila) and Pushkalavati (Charsada) in Gandhara; BMAC and Gandhara Grave Culture sites in Kamboja; Bairat, Gilund and Ojiyana in Matsya; Mathura, Sonkh and Noh in Surasena; Hastinapura, Hulas and Alamgirpur in Kuru; Ahichchhatra, Atranjikhera, Kannauj, Sankisa and Kampilya in Panchala; Ujjain, Kayatha, Nagda and Ahar in Avanti; Eran and Tripuri in Chedi; Kausambi and Jhusi in Vatsa; Rajghat-Sarai Mohana in Kasi; Ayodhya, Sravasti, Lahuradewa and Siswania in Kosala; Rajdhani, Narhan and Sohgaura in Malla; Rajgir, Chirand and Juafardih (Nalanda) in Magadha; Vaishali and Lauriya-Nandangarh in Vrijli, Champa and Oriup in Anga; and Adam and Inamgaon in Asmaka. In view of the archaeological evidence from the sites of the mahajanapadas it could be authentically concluded that these political principalities and states were well established during the 2nd millennium BCE, and that settlement at many of these sites must have begun even earlier.

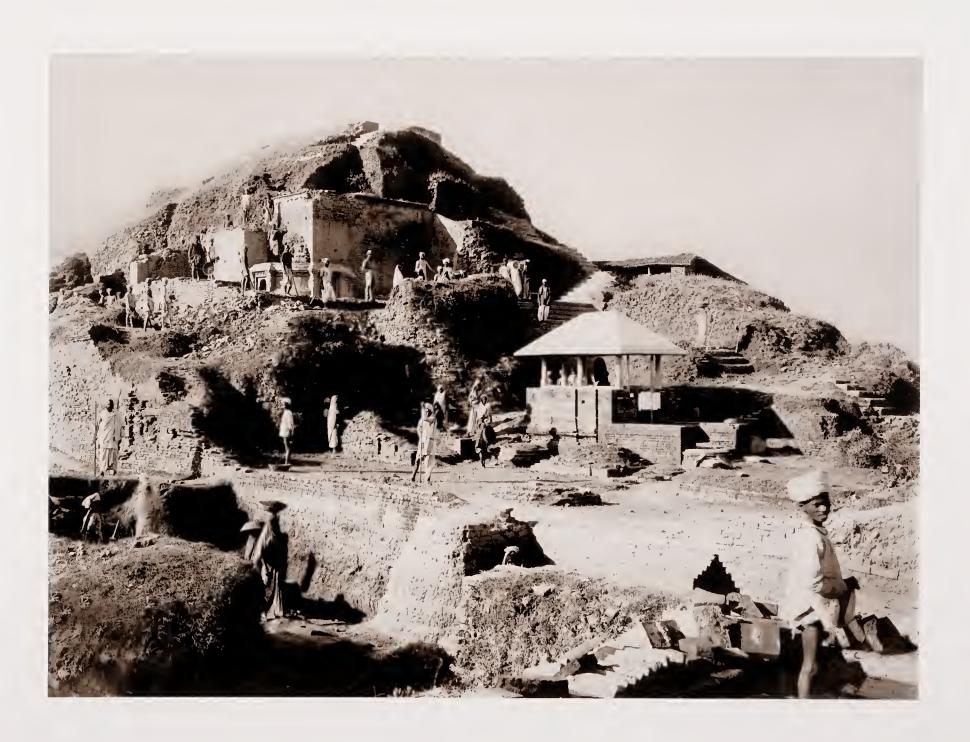
During the last 50 years, with a scientific approach towards investigative research, excavations at important historical sites throughout the length and breadth of the country have brought to light significant evidence of material culture. Many of these sites such as Kausambi, Sisupalgarh, Sankisa, Rajghat, Sravasti, Ahichchhatra and others had been excavated earlier, but required further scientific investigation which was accomplished during the period concerned. Some examples of these are given below.

Satanikota, District Kurnool, Andhra Pradesh, a city site which was occupied from stone age to medieval times, was excavated from 1977 to 1980.³ The site was with fortification and a moat in the Satavahana period.

The ancient port city of Pumpuhar mentioned in the Sangam literature and referred to as Kaberis Emporium by Ptolemy was identified with Kaveripattinam⁴ and was excavated by the ASI for several seasons from 1963 to 1973. It revealed a Buddhist monastic establishment, inlet sluice and wharf. The beginning of activities at the port city dates back to about the 3rd century BCE.

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This image from the ASI's Bihar and Orissa Albums, 1925–27 shows a view from the northeast of ongoing excavations at Site No. 3, the main stupa at the ancient Buddhist site of Nalanda, after removal of the tiled roof. Excavations conducted by the Archaeological Survey of India during 1915–37 and 1974–82 have exposed the extensive remains of six major brick temples and eleven monasteries arranged on a systematic layout and spread over more than a square kilometre area. A 30-metre-wide passage runs north—south, with the row of temples on the west and that of monasteries on the east of it.





View of excavations at the ancient fort of Sisupalgarh, one of the most important archaeological sites in India.

The remains of the ancient fortified city of Sisupalgarh are located on the southeastern periphery of the city of Bhubaneswar in Orissa, spread over a square kilometre or so. The site was first excavated in 1948, followed by another excavation in 1950. The most recent excavations were undertaken from 2002 to 2008–09. These excavations have furnished an evidence of human habitation for more than 700 years – from the 3rd century BCE to 4th century CE. The ancient remains within and outside the ramparts are protected as a National Monument within the Bhubaneswar Circle of ASI.

Excavations at Sringaverapura in Allahabad have provided a cultural sequence from about the 11th century BCE till medieval times, but the significance of the site lies in the massive Kushan-period burnt-brick tank and its elaborate inlet channel with intercommunicating system and terraced sides.⁵ This is perhaps the largest tank of ancient times so far discovered in the country.

Recent excavations at several sites throughout the length and breadth of the country have yielded results. Sankisa in District Farukhabad of UP was excavated by the ASI for two seasons from 1995 to 1997, and it established the early horizon of the site going back to the end of the 2nd or beginning of the 1st millennium BCE represented by Black Slipped, Black-and-Red and Painted Grey Ware culture, and continuing to the post-Gupta (c. 7th century CE) period.⁶ Similarly Siswania in District Basti of UP was identified with ancient Simsapavana of ancient Setavya after excavations for two seasons from 1995 to 1997.⁷ Excavations at Harnol and Muhammadnagar in District Gurgaon, Haryana in 1997–98 yielded remains of huge structures of the Kushan period.⁸ The former site also revealed a structure of the Northern Black Pottery Ware (NBPW) phase (c. 7th–6th century BCE), with large-size bricks measuring 72 x 48 x 8 cm.

Excavations at Lal Kot in Delhi for four seasons from 1992 to 1995 exposed remains of palace complexes of Rajput and early Sultanate periods, besides yielding a large number of antiquities and ceramics which established an index of early medieval pottery types. Later excavations were also carried out by ASI at Salimgarh, Tughlaqabad fort and Siri fort in Delhi. Amongst medieval sites, Hampi in Karnataka was significant as it brought to light huge palace complexes and allied structures, as part of the National Project initiated by the ASI in the early 1980s and continued for several seasons. Similar work was also carried out at Champaner-Pavagarh and at Fatehpur Sikri.

More recently, the disputed site of Ayodhya was excavated in the 2002–03 season, taking the antiquity of the site back to about the 16th–15th centuries BCE. And although Ahichchhatra in Bareilly district, UP has been excavated in the past for several years, it was re-excavated by the ASI during the last five seasons. The ASI excavated the Ahom royal burial mounds (Maidam) in Sibsagar district of Assam in 2000–02.

The site Ambaran in Akhnur, District Jammu has proved to be the only known Buddhist site in this region, and was under excavation for two seasons from 1999 to 2001. Two Buddhist stupas were excavated and a copper reliquary containing a silver casket, that itself held a gold casket containing pieces of bone, was found in one of the stupas. The southern wall and some chambers of a Kushan-

Gupta period monastery were also exposed and, in addition, Kushan coins and Kushan and Gupta antiquities and pottery were discovered.

Near Baramulla in Kashmir, the ancient site of Kanishpur, identified with Kanishkapura mentioned by Kalhana in his *Rajatarangini* (1148–49 CE) was excavated in 1998–99.¹¹ Evidence of the foundation of the city during the Kushan period was found over layers of neolithic settlements going back to the late 4th millennium BCE. The neolithic dates were confirmed later on the basis of C-14 determinations.¹²

Ter in Osmanabad district of Maharashtra has been identified with ancient Tagara referred to in the *Periplus of the Erythraean Sea* and by Ptolemy.¹³ Excavations in the 1960s brought to light evidence from the Satavahana and Shilahara periods and of a stupa and other structures and antiquities including Roman clay bullae and glass bottles of the Mediterranean type.

Excavations during the 1990s by the ASI at Chichali in Madhya Pradesh¹⁴ and Paithan,¹⁵ Adam¹⁶ and Mansar¹⁷ in Maharashtra brought to light significant evidence of the early historical period. Sirpur in Chhattisgarh, where excavations are still progressing, has revealed valuable antiquities, art objects and important structural complexes.

Excavations at Kanaganahalli in Sannati, District Gulbarga in Karnataka from 1994–95 to 1998–99 brought to light excellent stone panels of the Satavahana age from the remains of the mahastupa, including a labelled sculpture of Emperor Ashoka with the legend "*Raya Asoko*".¹⁸

Some of the important historical sites excavated in the last decade include Adi Badri in District Yamuna Nagar, Haryana; Udayagiri-2, District Jajpur, Odisha; Boxanagar, District West Tripura; and Dum-Dum mound, District North 24 Parganas, West Bengal. All belong to the early historical period, except Udayagiri-2 which continued in occupation till about the 11th century CE.

The ASI, Srinagar Circle excavated the site of Tibba Nameshah in 2008–09, which has revealed a cultural sequence from the Painted Grey Ware period to the post-Gupta period.

Excavations were conducted by the ASI in 2009–10 at Lathiya, a protected site in District Ghazipur of UP, which revealed the remains of four early Gupta temples and antiquities ranging from about the 3rd century BCE to the 6th century CE.¹⁹

Excavations at Kondapur, District Medak, Andhra Pradesh have been conducted since 2009 by the ASI, Excavation Branch, Bhubaneswar, and have revealed the site as a thriving urban city of the Satavahanas and an important centre of Brahmanical faith. Among the finds were a number of glass vessels (pieces of nearly eight cups) with Roman influence, Roman coins of Emperor Tiberius, a terracotta pendant embossed with the figure of Tiberius, and other glass material, suggesting brisk trade. Also uncovered were inscribed lead and copper coins of Gautamiputra Satakarni, Sri Satakarni, and Sri Pulumavi; Roman arretine ware and roulette ware; glass vessels akin to that found at Arikamedu and Ter; Roman coins and inscribed sealings all datable to the period between the 2nd century BCE and 1st century BCE.

Excavations at Malhar, District Bilaspur, Chhattisgarh were undertaken by the ASI's Excavation Branch, Nagpur in 2009 and are continuing at present. The site has revealed remains of the Satavahana period.

From the years 2007 to 2009, the Kerala Council for Historical Research (KCHR) excavated the site Pattanam in Kerala, identified with ancient Muziris, and in 2009–10 excavations took place in association with the ASI, Thrissur Circle. Four cultural periods were noticed, from about 1000 BCE to the late medieval period. The excavations revealed brick architectural remains, Roman amphoras, sherds of terra sigillata, West Asian pottery including the green-blue glazed Parthian/Sassanian ceramics, Turquoise Glazed Pottery, rouletted ware, Roman glass bowl fragments, semi-precious stone/glass beads, Chinese ceramics, gold ornaments and a large quantity of iron objects.

The excavations at Bangarh mound, District Dakshin Dinajpur, by the ASI, Kolkata Circle since 2008–09 have unearthed successive cultural sequences ranging from pre-Mauryan to Sultanate/Mughal.

Recent excavations on the slopes of the hills in front of the Ajanta caves have brought to light a brick-built monastic complex. Other finds include coins and figurines.

Apart from regular excavations, some chance finds have also proven to be significant. In 1961–62 the Horticulture Branch of the ASI discovered a large number of pieces of Chinese porcelain pottery at Kotla Firoz Shah in Delhi, which is considered to be the largest treasure of its kind in the world found outside China. These ceramics belong to the middle of the 14th century when the Tughluq ruler (either Muhammad or Firoz Shah) received them from China; inscriptions in Naskh characters recorded later on their base indicate that they were used in the royal kitchen.

As a source of Indian history, inscriptions are very important because in most cases they describe contemporary events. Ashoka's First Minor Rock Edict is a significant find, discovered in early 2009 in the Kaimur hills at Basaha in Bhabua District of Bihar. First reported by scholars of Jnanapravaha, it was published in a monograph by K.K. Thaplyal who mentioned the find spot as Ratanpurva.²¹ The site was also visited by this writer and a note was published in the e-newsletter *Sanatan*.²² At the foot of the hill at Basaha, a stupa was found by the ASI team.

A number of Satavahana inscriptions have come to light. One from Vasana, Dharwar district, Karnataka, belonging to Vasithiputa Siri Pulumavi (3rd century CE), records the making of the pillar by a carpenter (*vadhaki*) for [the temple of] Lord Mahadeva Chamdasiva. Phanigiri, a Buddhist site has yielded a number of early Brahmi inscriptions, one such being a record of Rudrapurushadatta, dated in his 18th regnal year (4th century CE). The discovery of an inscribed Hariti image²³ in Sarnath, mentioning Srigupta, is also important. In recent years, one of the most major discoveries is the largest set of copper-plates, from Indalur, Tamil Nadu, containing 85 plates belonging to the reign of Rajadhiraja Chola I (1053 CE), but issued during the reign of his successor Rajendra II, to register the gift of villages to brahmins. Some Perso-Arabic inscriptions, such as one from Ranthambhore fort of Sultan Fidan Shah of Malwa; and another from Jaisalmer consisting of a record of Akbar's envoy to Iraq, are considered important additions to epigraphical studies.

SCIENTIFIC PROCEDURE AND METHOD

Throughout the country, a number of very large archaeological sites which represent city sites, some of them with fortifications, still remain unexcavated and unidentified. A number of unprotected but very significant sites are being damaged by cultivation and construction activities; no serious steps have been taken in the recent past to stop such activity in spite of reminders to the concerned authorities. Many amateur archaeologists forming small societies or other organizations have been proposing excavation work without proper expertise and with insufficient staff to complete the work. To discourage such activities, a National Policy document was prepared by the Archaeological Survey of India and submitted to the Central Advisory Board of Archaeology at its meeting in December 2009. The National Policy has made it essential for every excavation programme to pursue a holistic approach to the study and for excavators to guarantee that they will have samples of soil, floors, plaster, human and animal bones, plant remains etc. collected using the appropriate methods and have them examined for incorporation in the detailed report. Paleoclimatic and geomorphological studies also need to be made essential facets of archaeological investigations. Besides this, a considerable number of samples for

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General view of the north wall of the Taj Mahal along the river Yamuna, showing desilting work in progress, from the ASI United Provinces Albums, Volume 2, dated 1936–37.

Situated on the right bank of the Yamuna in a vast Mughal garden of 17 hectares, the Taj Mahal itself stands on two bases, the lower one of sandstone and above it a square platform worked into a black-and-white geometric design, with a huge blue-veined white marble terrace.





Photograph of a carved stone architrave and door frame at the site museum in Khajuraho, from the ASI's Central India Albums, Volume 8, dated 1923–24. The carved frieze on the architrave has Ardhanarishvar Shiva at the centre, with Brahma and Vishnu on either side. In 1910 at the initiative of Mr W.A. Jardine, the local officer of the British government in Bundelkhand, scattered sculptures of the ruined temples of Khajuraho were collected and preserved in an enclosure built near the Matangeshwar Temple. The open-air collection continued to be known as the Jardine Museum until the Archaeological Survey of India took it over in 1952. Now this open-air museum is used for the reserve collection.

The ASI-protected group of temples at Khajuraho is inscribed as a World Heritage Site.

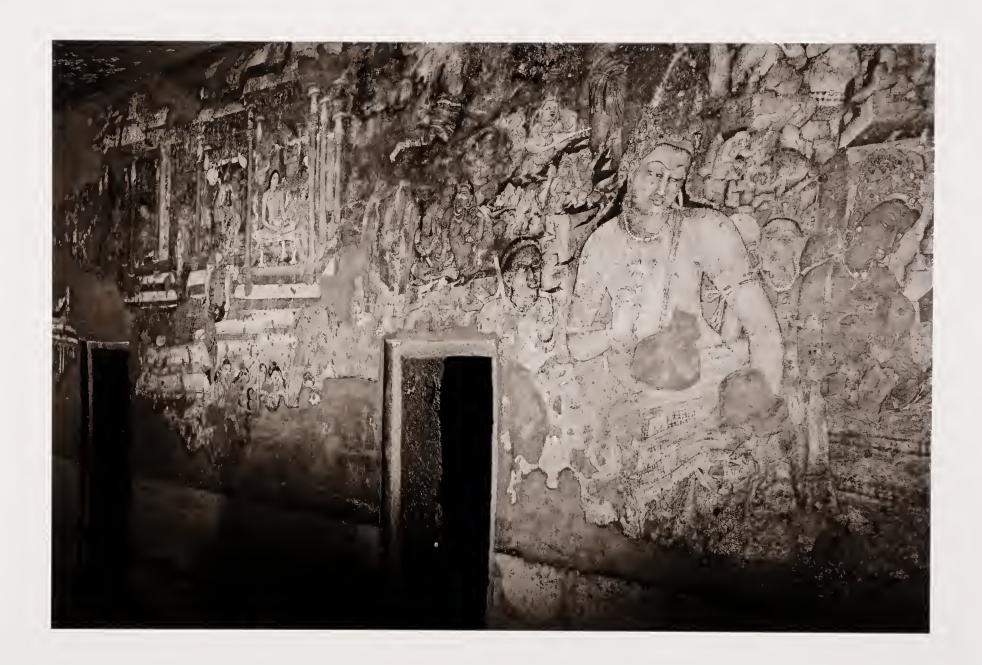
Accelerator Mass Spectometry (AMS), C-14 or other scientific dating procedures must also be collected and sent for analysis. There are examples of sites that have been excavated continuously for maný seasons without any scientific data being made available yet.

Recent scientific methods for the dating of samples have enriched our knowledge and successfully changed the earlier concept of the association of certain ceramics as limited to certain periods. New data reveal that the antiquity of some sites can be pushed back from the 7th-6th centuries BCE to the 16th–15th centuries BCE. The new dates from NBPW levels at Ayodhya, Agiabir, Jhusi and Rajdhani in Uttar Pradesh, Juafardih in Bihar and Gotihwa in Nepal have added a fresh chapter to the understanding of the origins and development of the early historic archaeology of the region. Thus early dates determined through the C-14 method and going back to the 3rd-2nd millennium BCE from Ganwaria, Prahladpur, Siswania, Khairadih, Takiaper, Dadupur and Mathura should not be ignored as accidental. Archaeologists consider isolated early dates determined from C-14 samples to be inconsistent in many cases and samples of charcoal among others could have been caused by wildfire and not as a result of human activity. Discussions on dating of the NBPW has gained momentum in recent years. Its interrelationship with the material culture of phases connected with PGW, Black Slipped Ware and Black-and-Red Ware and the preceding phase of Ochre Colour Pottery, together with the Copper Hoard Culture, would produce a clearer understanding of the archaeology of northern India from the middle of the 2nd millennium BCE to the mid-1st millennium BCE. Similarly early evidence of neolithic and chalcolithic phases in the region require special attention for the light they can throw on their origins, linkages, development and material culture.

MUSEUMS AND MONUMENTS

The ASI maintains 44 site museums and a number of sculpture-sheds at sites to house antiquities and important objects connected with them. Many of these museums have been set up during the last 50 years and most of them have been upgraded with better display, security and visitors' facilities.

One of the most important tasks of the ASI is to conserve and preserve the 3,677 Protected Monuments in the country. Being the nodal organization for matters relating to World Heritage in India, its responsibility has increased manifold in the recent past. Although new initiatives have been taken by the ASI in this regard, it is essential that further detailed documentation and structural analyses based on the latest scientific techniques should be undertaken on a wider scale



A contemporary photograph of the wall paintings of Cave I, Ajanta, showing the iconic image of Padmapani. This image, by Rajesh Vora, forms part of the recent documentation of the Ajanta World Heritage Site for the preparation of the Site Management Plan, Ajanta, by Abha Narain Lambah Associates.

The 30 rock-cut *chaitya* and *vihara* caves of Ajanta (Aurangabad Circle) were hewn into the face of a horseshoe-shaped gorge of the Waghora River in the Western Ghats, providing the perfect forest setting for meditation and retreat for Buddhist monks.

18

View of the colossal statue of Buddha at Bamiyan, Afghanistan, from the ASI's Bamiyan Albums. Between 1969 and 1977, the Archaeological Survey of India's Science Branch undertook the pioneering work of conservation of the colossal Buddha statues in Bamiyan. This work included the conservation of the wall paintings within the niches.

The two monumental rock-cut statues of standing Buddha figures in the Bamiyan valley in the Hazarajat region of central Afghanistan were dateable to the 7th century CE. These statues represented the classic blended style of Gandhara art, now lost to the world as a result of their wilful destruction by the Taliban in 2001.



as per international standards and norms. Recently the ASI has assumed the task of preparation of comprehensive conservation and management plans for protected monuments, and is coming out with a conservation policy document as a guide for future courses of action. Presently about 700 monuments are included in the conservation programme each year, depending upon priority and need. Some of the conservation works which have received wide appreciation include the translocation of temples under the Srisailam, Alampur, and Curdi projects and of monuments under the Nagarjunakonda project; the conservation of Gol Gumbaz, Bijapur; strengthening the foundation of the Qutb Minar, Delhi; deplastering and conservation of the temple of Jagannath at Puri; conservation of excavated remains at Sanghol, Hampi, Sarnath, Nalanda, Sravasti, Vaishali and Lothal. Besides structural repairs, chemical preservation and environmental development have been also taken up on a large scale at sites throughout the country. The Science Branch has its monitoring units at important monuments including the Taj Mahal and Ajanta caves where chemical preservation works are regularly pursued.

In addition to the funds available for conservation from the budget allocation in the ASI, the establishment of the National Culture Fund in 1996 under the Ministry of Culture has enabled contributions from corporate bodies across the country. Such corporations may now participate in conserving protected monuments, and nearly 25 such projects are ongoing.

India has been an active member of the World Heritage Convention since 1977, and so far 29 of its cultural and natural properties have been inscribed under the World Heritage List, of which nineteen come under ASI jurisdiction. ASI has earned a good name in conservation not only of its own protected monuments, but also of those beyond Indian frontiers – notably at Bamiyan in Afghanistan and Angkor Vat, Cambodia. With its expertise, it is working at Ta Prohm in Cambodia and at Vat Phou in Lao PDR. Most likely it will soon take up conservation work at the Ananda Temple complex at Bagan, Myanmar and also at the My Son group of temples in Vietnam.

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Conservation of Monuments in India: A 150-Year Perspective

Various ancient and medieval Indian historical chronicles and reference works, including religious texts such as Manjushri's *Vastuvidyashastra* (5th century CE), *Mayamata* (9th century CE) and *Samrangana Sutradhar* (early 11th century CE), are replete with instructions for the construction of and additions, alterations and repairs to temples and public buildings. Such interventions were often an act of reverence, or in remembrance of forefathers, or to cater to a new political or social requirement. There are also references to concepts such as *jirnodhar* (repairs and/or reconstruction), *patisankaram* (restoration), *puna karayi* (renovation) and *parkathika* (replacing new with old) that have been followed for repairs and additions to temples, buildings and complexes over the centuries in India. However, prior to the 19th century there was little consciousness about "conserving" past edifices for posterity, or as a tangible record of past cultures.

THE PRE-INDEPENDENCE ERA

The British administrators of India made an attempt to understand the subcontinent's history through its vast repository of tangible remains spread across its urban and rural landscape, many of which had been forgotten over time, engulfed by forests or by sands. It can be argued that early British interests ranged from divesting monuments of antiquities for European markets and museums, to a more genuine curiosity about monuments which, even in varying states of decay, were considered exemplary in terms of their architecture and antiquity.

Credit inevitably goes to the British for initiating and formalizing the fields of archaeology and conservation in India, and for institutionalizing a framework to protect India's monumental heritage, including the founding of the Archaeological Survey of India in 1861. Alexander Cunningham, an engineer and self-taught archaeologist, appointed as the first Archaeological Surveyor of the ASI

I

A bird's-eye view of the Qutb Complex, showing repairs to the screens of the Quwwatul Islam Mosque, from the ASI's Punjab Albums.

The mosque is protected within the ASI's Delhi Circle and is part of the UNESCO World Heritage Site of Qutb Minar and its monuments.

(1861–65) and later its Director General (1871–85), confined his activities largely to explorations and comprehensive surveys of monuments. The early activities of the ASI were geared towards building a formidable corpus of information on the subcontinent's monuments. In a memorandum issued in 1869, the ASI directed its officials to undertake detailed documentation of monuments via drawings, photographs, models and plaster casts, thereby building an impressive archive of the subcontinent's architectural heritage. It is worthwhile to note that while emphasis was laid on documenting a monument, there was little to suggest that its upkeep and conservation were accorded the same priority.

Monument maintenance and repair received attention with the appointment of Henry Hardy Cole to the position of Curator of Ancient Monuments in 1881. Cole toured the subcontinent to investigate the condition of monuments and recommend appropriate conservation measures to the authorities within whose jurisdiction the monuments fell. Cole produced three annual reports, one for each year that he was Curator; he also published a ten-volume series titled *Preservation of National Monuments* which was illustrated with drawings and photographs.

As for conservation measures, Cole's role was only advisory in nature as the implementing agencies, usually Public Works Department engineers, adopted a conservation strategy derived from their occupational matrix. Clearly, PWD engineers were ill-equipped to deal with historic structures. The absence of any guidelines for the maintenance of monuments prompted them to refer to the *Military Works Handbook*, a standard guide for building and maintaining colonial buildings throughout the subcontinent. It was only to be expected that the Curator of Ancient Monuments and the engineers shared a non-agreeable working relationship.

By the last decade of the 19th century, during the period of James Burgess, it had become obligatory for the Government of India to conserve monuments. Attempts were made by British archaeologists and engineers to undertake conservation works at several monuments across the country, even though the ASI was suffering substantial budget cuts.

It is generally stated that the golden era in the history of the ASI began with the appointment of Sir John Marshall, a prolific archaeologist, whose association with the Survey spanned 30-odd years, first as Director General and later as an Advisor. He arrived in India under the patronage of Lord Curzon, then Viceroy of India, and changed the course of archaeology and conservation in the country. Apart

2

Photograph showing repairs to the wall of the Jehangiri Mahal, Agra Fort, published in the ASI 1902-03 Annual Report. The report stated: "The preservation of the Palace was first taken in hand between the years 1876-1885, when a special archaeological division of the Public Works Department existed in the North-West Provinces.... In 1885 the archaeological division was abolished, and little or nothing more was done to the Mahall until the year 1899-1900. During that and the three subsequent years the work of protection and restoration was extended to all the chief parts of the building, and its execution has left nothing to be desired. Structurally, indeed, it may be said that it is now, thanks to the resourcefulness of modern engineering, more stable than it could ever have been before...all the massiveness of its proportions and the sculptured beauty impressed upon its stone-work have been revived.... It is much to be regretted that this photograph was not taken before the remains of the upper screen wall were touched, but it may be said that practically all that had been removed consisted of modern repairs."





Photograph showing repairs to the southwest corner *chhattri* at the Taj Mahal, from the ASI's United Provinces Albums, Volume 27, 1922–23. The careful numbering of marble pieces on the dome before repair works followed a methodology adopted in conservation works undertaken by ASI over the years.

4

Photograph from the ASI's United Provinces Albums, Volume 43, dated 1937–39, showing a general view of the repair works to drainage channels on the platform of the mosque to the west of the Taj Mahal.





Photograph by Henry Cousens of ongoing conservation works at the minaret of the Muhafiz Khan Mosque, Ahmedabad, Gujarat, from the ASI's Bombay Albums, Volume 1. The image has been marked with the photographer's initials on the stone at the bottom right. Cousens wrote, "Muhafiz Khan's mosque, in the north of the city, though not a large building, is a well proportioned one, and has its minarets intact. It was built, as its inscription tells us, by Jamal-ud-din Muhafiz Khan, governor of the city under Sultan Mahmud Bigarah, in A.D. 1492. It is distinguished for the exquisite character of its details; the galleries around the minarets, and the brackets which support them, display great richness of decoration. The carving is very Hindu in character, the under-cutting of the arabesque being so complete as almost to separate it from the block on which it is wrought. The mihrabs are about the finest in Ahmedabad, and are minutely and elaborately carved. The facade of the building has the minarets at the extreme ends, and has three small arched entrances instead of one large one."

The mosque is a National Monument protected by the Vadodara Circle of ASI.

from several archaeological excavations that he successfully led during his tenure, he is credited with the formalization of conservation of monuments in a scientific and rational manner for the first time.

Marshall's contributions to the conservation of India's monuments stem from two vital publications: Indian Archaeological Policy (1915) and Conservation Manual: A Handbook for the Use of Archaeological Officers and others Entrusted with the Care of Ancient Monuments (1923). These two documents are critical in underpinning the foundations of a scientific approach to conservation in India. They are also heavily imbued with the philosophy of William Morris and the 1877 Manifesto of the SPAB (Society for the Protection of Ancient Buildings, London) which leans towards retaining a monument as an object and often as part of a picturesque setting, with attention paid to preserving the original historic material, strictly discouraging any attempts at restoration and recommending that conservation should be a continuous pursuit. Marshall advised that "indigenes" should also participate in archaeological expeditions and conservation of India's monuments. He also attempted to classify monuments into three broad categories, suggesting extensive conservation works only for the most iconic structures.

The Conservation Manual was, and is still believed to be, amongst the most forward-looking and scientific documents of its time, enumerating conservation principles to be adopted for India's monuments, while keeping in mind their rich diversity in terms of function and material. Different approaches to conservation, for instance, were adopted for monuments that were considered "ancient" and "mediaeval", the classification based more or less on religious grounds. Causes of decay, mannade and natural, were identified and consequent conservation actions to be taken were recommended accordingly. Due emphasis was given to a comprehensive documentation and an inspection note of an archaeological officer preceding conservation work. Emphasis was also laid on environmental upgradation around a monument and on the scientific clearing and replanting of historic gardens that were a part of a monument. To Marshall's credit goes the conservation of a number of monuments and sites, notably the Sanchi stupas, the Buddhist temple at Bodhgaya and a vast number of Islamic and Mughal monuments at Delhi, Agra and Fatehpur Sikri.

The years between Marshall's eventual departure in 1934 and India's Independence in 1947, were affected largely by the Second World War, and later the monumental event of India gaining Independence. During this period, there were drastic cuts in budget allocation to the ASI, and hence no major conservation works were attempted anywhere in the country, only maintenance work was carried out. However, during Sir Mortimer Wheeler's brief tenure as Director General



Photograph showing conservation works of the South Bhadra Gate (Godhara Gate) at Panch Mahal. Champaner, Gujarat. The image shows an early repair, entailing a bamboo scaffold, and a chain and pulley system for raising blocks of stone for anastylosis.

The site of Champaner-Pavagarh was inscribed as a UNESCO World Heritage Site in 2004 and is protected by the Vadodara Circle of ASI.

7

Photograph of cleaning and conservation works in progress at the entrance to the rock-cut *chaitya* cave at Karla, Maharashtra, from the ASI's Bombay Presidency Albums, Volume 43. Cousens described the Karla Cave in *Architectural Antiquities of Western India*, 1926: "The outside has suffered badly by the fall of much of the rock face, which has carried away the greater part of the facade and court before the entrance. This might, in great measure, have been spared had the excavators properly drained the slope of the hill immediately above the facade."

The site is a National Monument protected under the Mumbai Circle of ASI.





С

Photograph of the conservation work on the colossal statue of Trimurti in Cave I, Elephanta, Maharashtra. The craftsmen are wielding a hand rotating drill to consolidate a section of the lower lip of the head on the left. James Burgess wrote in 1871, "The island of Elephanta, or Gharapuri, as it is called by the Hindus, is about 6 miles from Bombay, and four from the shore of the mainland...it was named Elephanta by the Portuguese, from a large stone elephant that stood near the old landing place on the south side of the island.... The most striking of the sculptures is the famous colossal three-faced bust, at the back of the cave, facing the entrance. This is called a Trimurti or triform figure."

The caves of Elephanta/Gharapuri are protected under the Mumbai Circle of ASI and are a UNESCO World Heritage Site. (1944–48), conservation was centralized throughout India, and engineers were appointed within the ASI and entrusted with the task of conservation rather than relying on the provincial Public Works Departments. Also, the number of ASI Circles was expanded, Museum and Excavation Branches were created and the Central Advisory Board of Archaeology (CABA, 1945) was formed.

Post-Independence

After Independence the ASI continued its operations related to the conservation of monuments across India, underpinned by the British ideology and methodology. However, its operations expanded considerably, the network of Circles being further enhanced. Today ASI undertakes conservation operations across the country through a network of 24 Circles, one Mini Circle (at Leh), and Science and Horticulture Branches, together with each Circle's own network of Branch offices.

In the 65 years since India's Independence, Indian archaeologists and engineers, under the guidance of renowned names such as A. Ghosh, B.B. Lal, M.N. Deshpande, M.C. Joshi, J.P. Joshi, Debala Mitra, M.S. Nagaraja Rao (Director Generals at various points in time), are credited with a number of significant conservation initiatives at some of the most iconic monuments and archaeological sites across the country. Stupendous conservation works were carried out by the ASI from the 1950s to 1970s, both in India and abroad, whether these were the caves of Ajanta and Ellora or Kanheri, the temples of Khajuraho, Konarak or Thanjavur, medieval hill forts in Rajasthan, or archaeological sites like Lothal and Dholavira. Most monuments, earlier in a dilapidated state or on the verge of collapse, were painstakingly conserved through consolidation or preservation. Restoration was attempted only in a few cases, for instance with the dome of Gol Gumbaz, Bijapur. During the 1960s, ASI carried out the translocation of several structures, for example during the submergence of the Buddhist site at Nagarjunakonda due to a dam project. Several other instances are available wherein ASI has translocated temples, for instance at Alampur under the Hyderabad Circle.

Seminal work in scientific conservation has been carried out to preserve wall paintings and decorative plasters in monuments across the country through the interventions of the Science Branch. Dr B.B. Lal, then Senior Archaeological Chemist, is credited with the painstaking conservation of Ajanta cave paintings and sculptures in the 1960s. Other notable contributions of the Science Branch include cleaning wall surfaces and restoring sculptures and panels at Sanchi Stupa 1 also in the 1960s, conserving the colossal image of Buddha at Bamiyan in Afghanistan (including paintings within the niches) in the 1970s, and the work of conserving wall paintings within several monasteries in Ladakh during the 1990s.

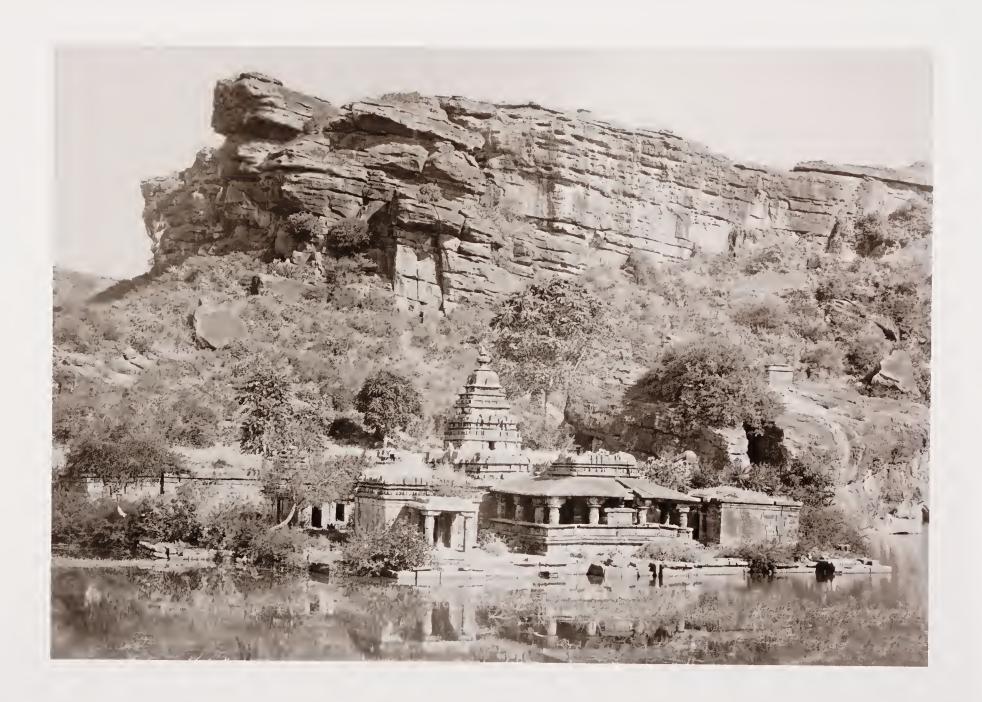


View of the Gol Gumbaz, Bijapur, Karnataka, from the ASI's Bombay Albums, Volume 34, dated 1935-37. This image shows scaffolding on the monumental dome during repair works. Bijapur was part of the Bombay Presidency that included Gujarat, Maharashtra and parts of Karnataka. The Adil Shahi monuments at Bijapur date from the late 15th to late 17th centuries. These are an ensemble of about 68 small and large monuments including fortifications, gates, water systems and tanks, several mosques and tombs and palatial structures. The most striking amongst these is the Gol Gumbaz, a monumental feat of structural engineering and famed as the second largest dome in the world. The monument is within the Dharwad Circle of ASI.

10

Interior view of the dome of the Gol Gumbaz, Bijapur, Karnataka, from the ASI's Bombay Albums, Volume 18, dated 1949–50. This image shows major structural repairs to the interior of the dome at Gol Gumbaz, which included guniting and introduction of reinforcement bars. Here, workmen use a jet nozzle for pressure cleaning of the masonry surface before guniting.





II

A photograph by Henry Cousens from the 1880s, showing the Bhutanatha group of temples on the eastern edge of the tank, Badami, Karnataka. Cousens wrote in *The Architectural Antiquities of Western India*, 1926: "Badami was an early capital of the Chalukyan dynasty, when it was known under the name of Vatapi, the old form of its present name; indeed, it is safe to assume that it was in the hands of the Pallavas of the south before it came into those of the Chalukyas...upon the hill, above the temple, is another in ruins, while upon the farther margin of the lake, is the picturesque group of Bhutanatha of somewhat later date, making a very attractive picture with its reflections among the reeds of the lake."

The monument is protected within the Dharwad Circle of ASI.

12

Contemporary image of the Bhutanatha group of temples on the eastern edge of the tank, Badami, Karnataka.



Horticultural operations have been undertaken at more than 500 monuments and sites with a view to ameliorate the environment within and around a monument and to keep it relatively dust-free, thus negating any adverse impact of wind-induced abrasion. Significant horticultural contributions were made in restoring the Mughal gardens of the Taj Mahal in the early 20th century, and other Mughal and Sultanate monuments in Delhi and Agra. Gardens have been laid out at several important monuments like Khajuraho, Bijapur, Bidar, Konarak, to name a few.

All these works undertaken by the Survey have been well documented, as is attested by the annual reports as well as by the vast number of before-and-after images of monuments that are available within ASI's photo archives as well as within each Circle or Branch.

Today, the ASI is entrusted with the responsibility of conservation of 3,677 monuments and archaeological sites across the country. These monuments comprise a vast array of built edifices and



A photograph by Henry Cousens dated 1880s of the temple of Mallikarjuna, Pattadakal, District Bagalkot, Karnataka. Cousens described the site in The Architectural Antiquities of Western India, 1926: "Pattadakal, or, as it was known in ancient times, Pattada-Kisuvolal, is now an insignificant little village, tucked away in rather an out-of-the-way corner of the Badami district; but it must have been at one time a great centre of religious activity, and, with Aihole and Badami, an important spot in the kingdom of the early Chalukyas.... The temple of Trailokyesvara, or Mallikarjuna, standing between the other two, is of the same general plan and design as that of Virupaksha; the interiors, save for a slight increase in the width of the latter, being exactly the same, even to the two little shrines, one on either side of the entrance to the main shrine. It has not, however, been completed, some of the shadowy forms of the sculpture, in places, only just emerging from the rough."

The Pattadakal group of temples is protected within the ASI Dharwad Circle.

14

Contemporary image of the temple of Mallikarjuna, Pattadakal, Karnataka. are a tangible manifestation of India's rich past, that cover archaeological sites, cave shelters, rock-cut temples, monoliths, sculptures and bas-relief panels, underground structures, and buildings representing various typologies, i.e. religious, palatial, residential, defensive, funerary, civic, institutional, landscape, etc. These monuments reflect a range of building materials – earth, wood, stone, brick, lime, metal, glass etc. – and their complex composite application. They employ different construction techniques, represent different architectural styles and ornamentation, and reflect cross-cultural influences and interactions over the millennia. There are also tremendous regional variations witnessed in monuments in terms of materials, styles and techniques, due to influence of local climate, geology and indigenous styles of ornamentation.

Conservation of nationally protected monuments is considered a continuous process wherein attention is paid to regular maintenance of all monuments. Every year, conservation works are carried out by the



ASI at 800-1,000 monuments depending upon various priorities as identified by the Circles and upon the availability of financial and human resources.

It is critical to mention here that during this period the ASI engaged in the conservation of monuments guided by its own Manual, and it is often argued that there was virtually no updating of its approach to conservation given the radical transformation happening elsewhere in the world. Benchmark documents promulgated by UNESCO and ICOMOS, such as the Venice Charter (1964), Nara Document on Authenticity (1992), Burra Charter (1995) and a host of other charters and guidelines, reflected the new approaches to understanding a monument and its setting. These documents laid out elaborate guidelines for various kinds of interventions to be allowed in historic buildings, including their immediate setting or environment. They focused on authenticity and integrity in terms of a structure's completeness, form and design, and considered the role of intangible concerns for living monuments and modes of engaging local communities.

This renewed understanding of conservation has found sporadic reflections in the ASI's own conservation approach. With the passage of time, there has been an increasing influence of organizations such as INTACH' (Indian National Trust for Art and Cultural Heritage), established in 1984, and an army of conservation professionals who have begun their foray into India's monuments in partnership with the ASI, to develop a "holistic" approach to conservation. This basically means that all aspects that have direct or indirect bearing upon a monument are addressed before devising an effective conservation solution. Similarly, there has been a thrust towards developing partnerships with public and private agencies, including public sector undertakings (PSUs), Trusts and NGOs, which can help the ASI in various conservation initiatives and in providing visitor amenities. One such partnership is with the AKTC (Aga Khan Trust for Culture) that has of late yielded a positive inclination towards conservation, providing a fillip for engaging communities associated with or living near monuments. Such public-private partnerships are increasingly being encouraged, through the auspices of the National Culture Fund, set up by the Ministry of Culture, Government of India, not only to bring in the desired funds for the maintenance and upkeep of a monument, but to engage civil society in the noble cause of "adopting" a monument.

After ratifying UNESCO's World Heritage Convention (1972) in 1997, the ASI has been declared the nodal agency in India for World Heritage related issues. It is entrusted with the task of identification of monuments, or other building/site types, worthy of being declared World Heritage properties.

15

Contemporary image of the World Heritage Site of Qutb Minar in Delhi showing the Alai Darwaza. Photograph by Abha Narain Lambah. It was not until the Alai Darwaza in 1305, that the dome was successfully constructed in Indo-Islamic architecture. Ala al Din Khalji constructed a gateway, not a sepulchral monument, and yet it remains a key link in the development of tomb typology, successfully combining engineering prowess with a sophisticated architectural aesthetic. The double-height fenestration scheme, rosebud voussoir detailing and polychrome inlay stonework became a prototype for later Sultanate structures. The monument is protected within the Delhi Circle of the ASI and is part of the UNESCO World Heritage Site of Qutb Minar and its monuments.





The UNESCO World Heritage Centre's *Operational Guidelines for the Implementation of the World Heritage Convention* (2011) states the conditions to be fulfilled for a site to be designated a World Heritage property. Getting a monument listed is an extremely arduous task wherein it is imperative to demonstrate and give a long-term commitment to the effective conservation and management of the proposed site, and maintaining its authenticity and integrity. Out of the 29 World Heritage properties so far in India, comprising cultural and natural sites, the ASI has the maximum properties under its custodianship: nineteen in all.

Conservation Works Abroad

To the ASI's credit, apart from conservation of monuments in India, is the initiative undertaken, at the behest of the Government of India, to conserve monuments in other countries. Dr R. Sengupta, then ASI's Director Conservation, is credited with the conservation of the colossal Buddha statues in Bamiyan, Afghanistan (1969–77). Another conservation initiative worthy of mention here is that of the temple complex of Angkor Wat in Cambodia (1986–93). Undoubtedly, both these projects were challenging, not only in terms of managing human resources in the fragile political landscapes of these countries at the time, but also in terms of the challenges inherent in structural conservation works. At Bamiyan, the works included structural repairs to the statues and buttressing the rocks appropriately, as well as resurrecting fragments of paintings within. At Angkor Wat, several collapsed portions of the temple complex were reassembled and re-erected using anastylosis, the most famous being the reconstruction of the Samudra-manthan gallery and of the main temple.

The ASI is, at present, working at two World Heritage Sites in Southeast Asia – the Ta Prohm temple complex in Cambodia (2004 till present) and the Vat Phou temple complex in Lao PDR (2009 onwards). At Ta Prohm, where conservation works are well underway, the ASI has been entrusted with the most challenging task of conserving various temple structures overwhelmed by fully-grown trees of the species *Tetrameles nudiflora*, commonly known as Speung, that grow up to 40 metres high. The complexity of conserving living trees along with the structures entails supporting both their live or dynamic loads and the dead load of the structure itself, using dry load-bearing masonry, something that has never been attempted before by the Survey. This has ensured that the delicate balance between nature and buildings is maintained even while securing adequate stability for the temple structures. The trees growing over structures have been conserved after necessary treatments, and at several locations they have been covered by wooden platforms or steps to ensure there is no further injury to roots or stems.

16

Contemporary image of the World Heritage Site of Humayun's Tomb, Delhi. Photograph by Janhwij Sharma.

Humayun's Tomb, built during the reign of Emperor Akbar, is a masterpiece of Mughal architecture and formed the prototype for the Mughal tomb set in a garden, laying the basis for the development of the Taj Mahal. Recent conservation works were undertaken by the ASI Delhi Circle in partnership with the Aga Khan Trust for Culture under the aegis of the National Culture Fund.



ASI teams have also visited My Son World Heritage Site in Vietnam and the Ananda Temple complex in Myanmar, and the Government of India has pledged support towards the conservation of these iconic sites.

EPILOGUE: REVISITING THE CONSERVATION POLICY FOR MONUMENTS

It is a well known fact that the nature of duties of the ASI has changed manifold since its inception and, therefore, its responsibilities for the conservation of a protected monument have gone beyond its earlier mandate of simply preserving its fabric. Monuments, as the finite and non-renewable resources of our country, are being subjected to ever-increasing visitation and development like never before, and this puts an unprecedented pressure on them, making them more vulnerable.

17

Photograph showing conservators of the ASI Chemical Branch at work in Bamiyan, Afghanistan, during the pioneering conservation of wall paintings in 1969–77. Prime Minister Manmohan Singh in his Address at the 150th Year of the ASI in December 2011 noted, "The ASI is actively involved in a number of conservation projects of major monuments in Cambodia, Laos, Vietnam and Myanmar. A lot of good restoration work has been done in the past and this international outreach should be preserved. ASI's brilliant conservation work in Bamiyan in Afghanistan is still highly appreciated."

ASI is at present working on a *Conservation Policy for Nationally Protected Monuments*, aiming to draw from its own rich legacy of conservation and various international guidelines available in this regard, but also suggesting substantive changes in approach to conservation policies and principles to be adopted for interventions within and around a monument. The Policy attempts to put a monument in perspective (as a ubiquitous part of its setting), and underpins the role of local communities and traditional craftsmanship as an integral part of the conservation process. The Policy, for the first time, attempts also to deal with very important and topical aspects such as tourism, sustainable development, capacity building and building partnerships.

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Portfolio













North India



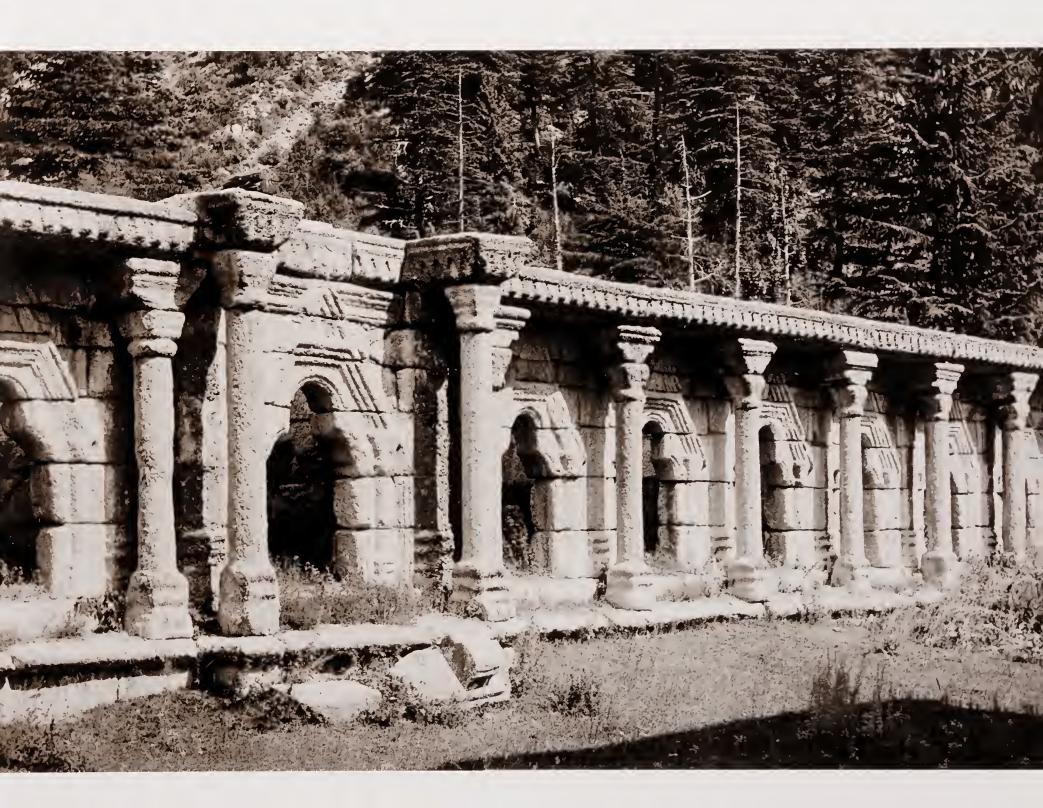
I

An early 20th-century view of Leh palace and Leh town, Ladakh, by Babu Pindi Lal, from the ASI's Indian Tibet Albums, dated 1909. A.H. Franke writes in *Antiquities of Indian Tibet*, "On our way down from the top of the hill, we passed by the Great Palace of Leh which was erected by King Seng-ge-Rnam-Rgyal in circa 1620 a.D. As I knew from former visits, it is practically empty. We did not enter it but photographed the carved wooden gate." The Leh Palace is protected by ASI's Leh Mini Circle.

7

A 19th-century photograph from the ASI's Kashmir Albums, Volume 2, of the ancient temple of Buniyar showing the colonnade with trefoil arched recesses. John Burke photographed Buniyar during his visit to Kashmir with Henry Hardy Cole in 1868.

The Hindu temple of Buniyar in Baramulla District, Jammu & Kashmir, is a protected monument within the Srinagar Circle of ASI.





An 1864 signed photograph by Samuel Bourne of the temples and bazaar of Chamba.

Chamba valley in present-day Himachal Pradesh has a wealth of ancient temples. The Shri Bajreshwari, Shri Sita Ram, Shri Bansi Gopal, Hari Rai, Chamunda Devi, Champavati and Lakshman Narayan Group are protected by ASI's Shimla Circle.

4

View from northwest of the Lakheshwara (Lakhamandal) Temple with the stunning backdrop of the Himalaya. This image from the ASI's United Provinces Albums, Volume 35, dated 1929–31, shows the temple after conservation.

The Lakhamandal Temple in Dehradun District of present-day Uttarakhand is an ASI protected monument within the Dehradun Circle.





An early image of the Tughluq-period Lat ki Masjid at Hissar, showing a general view of the monument and excavations, from the ASI's Punjab Albums, Volume 19, 1913–14.

Hissar in present-day Haryana was founded by Sultan Firoz Shah Tughluq in 1354, where he established a canal to feed the hunting ground. The medieval Lat ki Masjid, along with the Firoz Shah Palace and Taikhana, Gujri Mahal, Prithviraj Chauhan's Qila as well as the ancient Harappan site of Rakhigarhi are protected monuments in Hissar District under ASI's Chandigarh Circle.

(

A 19th-century view of Sher Mandal and Purana Qila, Delhi, showing a dense settlement within the fort, from the ASI's Punjab Albums.

On the legendary site of Indraprastha, the fort was built by Emperor Humayun and later occupied by Sher Shah Sur who named it Sher Garh and constructed the Sher Mandal. When the Mughals recaptured Delhi, the octagonal structure was used as a library and it is believed that Humayun tripped on its stairs and fell to his death in 1556. Purana Qila is protected by the Delhi Circle of ASI.



151



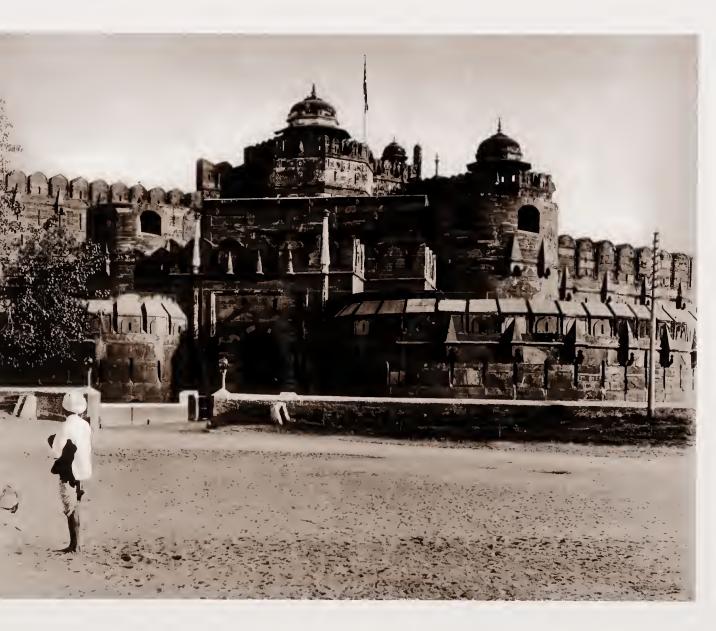
A family of refugees living in Purana Qila, image from the ASI's HQ Albums dating from 1947–48. In the wake of India's Partition in 1947, there was an unprecedented displacement of over twelve million people across the newly drawn up border between India and Pakistan. Refugee camps to house the swelling numbers were set up across Delhi, many families being accommodated at Purana Qila.

8

An 1880s view of Delhi's Lodi tombs, attributed to Henry Hardy Cole, showing the entire area overrun with vegetation and a settlement around the Bada Gumbad. Image from the ASI's Punjab Albums, Volume A.

The Lodi sultans, of Afghan stock, ruled Delhi after the Sayyids and were eventually vanquished by the Mughals at the Battle of Panipat in 1526. The medieval Sultanate-period tomb of Sikander Lodi with its enclosure wall and bastions, gates and compound is protected by the Delhi Circle of ASI.





A 19th-century photograph by Lala Deen Dayal, of the Red Fort, Delhi, with the British flag flying atop the gateway.

Built by Emperor Shahjahan between 1638–48, the Red Fort was converted into a British garrison after the 1857 First War of Independence. Since India's Independence in 1947, each year on August 15, the Prime Minister of India addresses the nation from its ramparts. The Red Fort is protected as a National Monument by ASI Delhi Circle and was inscribed by UNESCO as a World Heritage Site in 2007.

Image courtesy Indira Gandhi National Centre for the Arts (IGNCA), New Delhi.

10

Adhai Din-ka-Jhonpra (two and a half day mosque) at Ajmer, Rajasthan.

This congregational mosque is amongst the earliest Islamic monuments in India, built by Qutb aI din Aibak of the Slave Dynasty in the early 13th century. The arched screen was added by Iltutmish. The Adhai Din-ka-Jhonpra is a protected ASI monument within the Jaipur Circle.





ΙI

A 19th-century photograph of Gopal Bhawan flanked by the Sawan Bhadon pavilions, Deeg Palace, Bharatpur District, Rajasthan. Deeg Palace was photographed by Reverend Simpson and later by Deen Dayal in the 19th century.

The palace is a protected ASI monument within the Jaipur Circle.

12

View of the entrance to Jodhabai's Palace at Fatehpur Sikri, from the ASI's United Provinces Albums, Volume 2 dated 1902-03. John Marshall wrote in the ASI Annual Reports 1902-03, "Nowhere else in India has recent conservation work been more systematic or more steadily guided by a large and comprehensive purpose than in Agra.... It was not until I899 that a re-awakening came, and that the work was resolutely resumed. During the five years which have since elapsed, the new spirit infused into the scheme has already been productive of remarkable fruit, and before another five years have flown it is hoped that all the chief undertakings will be nearing completion. By that time all the buildings that are worthy of conservation in Agra itself, or at Fathpur Sikri or at Sikandarah will have been put into a state of thorough repair and it will remain only to maintain them in that state..."





View of the majestic Main Gateway to the Taj Mahal, Agra, with a horse-drawn carriage standing before the sandstone structure. Image from the ASI's United Provinces Albums, dated 1902–03. An earlier photograph showing the same view, taken by John Murray in the 1850s, lacks the intricately carved sandstone posts erected during the time of Lord Curzon. Marshall recorded in the 1902–03 *Annual Report*, "Within the quadrangle before the main or southern entrance of the Taj several striking improvements have been affected. The roads have been metalled...the cloisters around the quadrangle have been repaired to the extent of having their broken dripstones, brackets and all the dilapidated parts of the plinths, pillars etc., renewed in red sandstone."

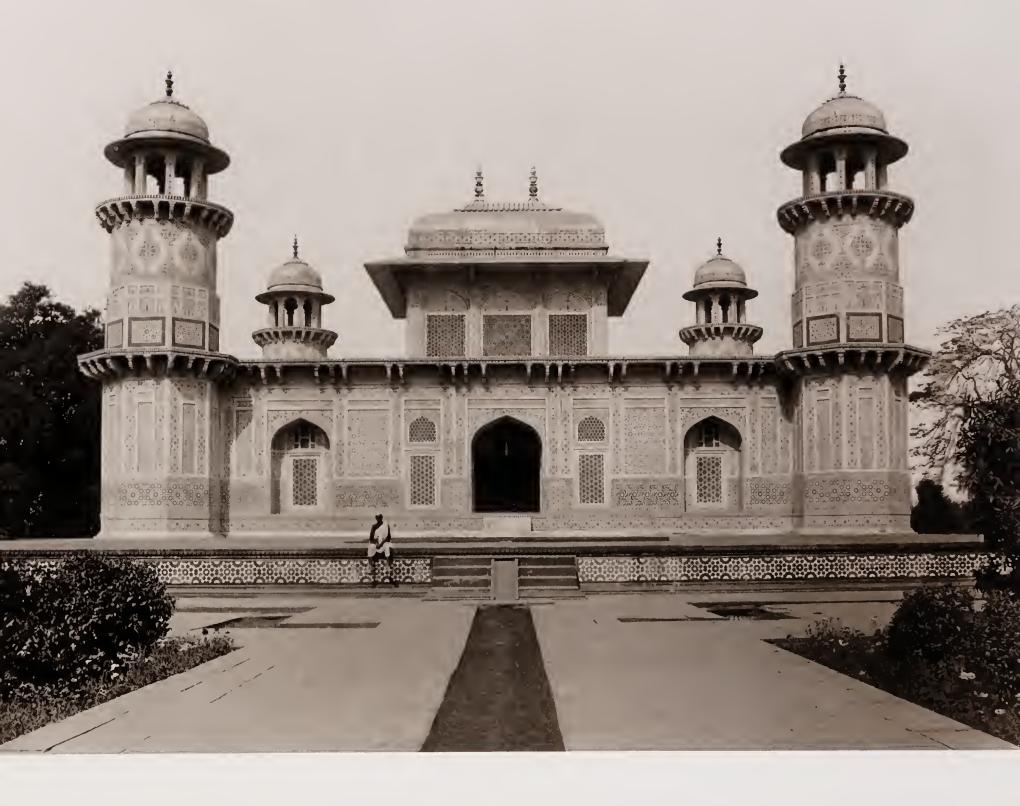
The Taj Mahal is protected within the Agra Circle of ASI.

14

Photograph by Lala Deen Dayal of the Taj Mahal, Agra. John Marshall reported in 1903, "The most striking change effected – and one which has contributed greatly to the beauty of the gardens – has been the restoration of the central causeway running east and west, and the reconstruction of the water channels which had been filled up and converted into flower beds. At the same time, twenty four fountains around the marble tank in the centre of the garden were replaced. This latter work involved the removal of a water main, and the laying down of nearly a thousand feet of iron piping for the irrigation of the garden, and of branch pipes for the fountains around the central tank."

Image courtesy Indira Gandhi National Centre for the Arts (IGNCA), New Delhi.



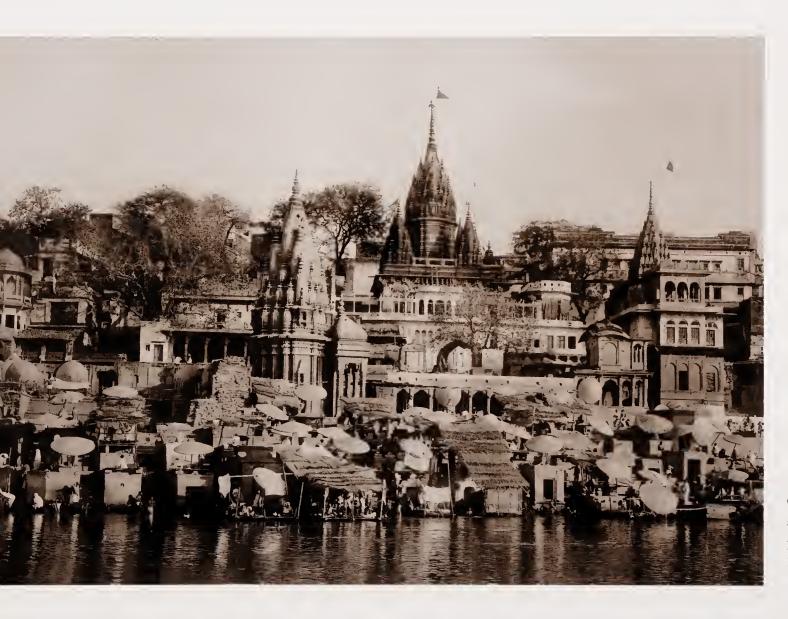


Front view of Itimad-ud Daula's Tomb, Agra, from the ASI's United Provinces Albums, 1900. This early photograph of the tomb shows it before the installation of marble railings in 1901–02. The intervention was described by Marshall in the ASI Report 1902–03: "The work of replacing this missing balustrade was begun in 1901–02 and only completed towards the end of the past year. It may be remarked that only recently has the existence of such principles governing the construction and adaptation of geometric designs on Mughal buildings been observed, and that we are indebted to Mr. E.H. Hankin both for this useful discovery and for working out the particular designs for the new balustrade."

16

Photograph showing the newly installed marble balustrade atop Itimad-ud Daula's Tomb, Agra. The Englishman seated in the doorway is perhaps Mr E.H. Hankin who was credited for the "useful discovery and for working out the particular designs for the new balustrade".





General view of temples and ghats along the Ganga, Varanasi. The photograph is from the ASI's United Provinces Albums, Volume 2, dated 1902–03.



CENTRAL INDIA



I

View of Raja Man Singh's Palace, Man Mandir, at Gwalior Fort, most probably by Lala Deen Dayal in the 1880s.

Man Mandir was constructed during the reign of Raja Man Singh in the late 15th century and is said to have influenced Akbar's style of building. Gwalior Fort in Madhya Pradesh – including Bada Mahal, Alamgiri Gate, Ganesa Gate, Chaturbhuj Temple, Lakshman Gate, Raja Man Singh's Palace, Rock Cut Jain Colossi, Sas Bahu Temples, Teli-ka-Mandir and Urwai Gate – is protected by the ASI under its Bhopal Circle.

2

A 19th-century photograph showing the northwest view of the smaller Sas Bahu Temple, Gwalior Fort, Madhya Pradesh.

This temple consists of an open-sided porch with a pyramidal roof. Located within Gwalior Fort, the Sas Bahu Temples (mother-in-law and daughter-in-law temples) are dedicated to Vishnu. These are ASI monuments within the Bhopal Circle.





A general view of the Shahi Mahal, located on the left bank of the river Tapti, from the ASI's Central Provinces Albums, Volume 3. This image was published in the ASI Annual Reports 1918–19. The report records, "The estimate, which amounts to Rs. 2,083/- embodies the recommendations made by Mr. Blakiston in 1912, and aims at strengthening the masonry at the base of the edifice, supporting cracked lintels, filling cracks in the roof, securing old plaster and other minor items."

This palace situated within the Fort in Burhanpur, Madhya Pradesh, is a protected ASI monument within the Bhopal Circle.

4

Early view of the Kandariya Mahadeva Temple at Khajuraho taken by Joseph David Beglar in 1871–72. Notice the group of thirteen men in traditional costume standing on the platform. Khajuraho was the capital of the Chandela dynasty which ruled central India around the 9th century CE. The Kandariya Mahadeva Temple represents the culmination of the Nagara or Northern Indian style of temple architecture. The ASI protected group of temples at Khajuraho is inscribed as a World Heritage Site.





View from the northeast of the Vishnu Varaha
Temple located at Bhilhari, Tehsil Rithi in District
Katni of present-day Madhya Pradesh. This image,
from the ASI's Central India Albums, Volume 5,
was published in the ASI Annual Reports 1919—
1920 which recorded works of re-erecting and
strengthening the old columns, closing the openings
on the north and south of the shrine with wire
netting, replacing missing stone in the platform
southeast of the porch, erecting a wire fencing
around the platform and collecting inside it the
images previously lying scattered around.
The temple is protected by the Bhopal Circle of
ASI.

6

Darya Khan's Tomb, Mandu from the ASI's Central India Albums, Volume 10.

The impressive hill-fort of Mandu was the capital of the Sultans of Malwa in the 15th–16th century. The tomb was once decorated with encaustic tiles, the details of which are now lost. This is a protected monument within the Bhopal Circle of ASI.





A photograph by Lala Deen Dayal of repair works at Sanchi Stupa I. The marking "D. Diyal" is visible to the left of the standing woman in the foreground. Cole recorded, "Mr. Mears, in March 1881, Superintendent of Public Works at Sehore, was deputed to remove jungle from the several ruins; to collect all the carved stone fragments; to repair the great breach in the tope; to remove creepers from the face of the mound; to fill in the shaft sunk in the tope; and to clean the sculptures of the northern gateway. A series of photographs showing the progress of these measures have been taken by Din Dayal, Estimator and Draftsman in Colonel Thomson's Office at Indore, and the negatives will be sent home to be reproduced by some one of the permanent processes."

The Buddhist monuments at Sanchi were inscribed by UNESCO as a World Heritage Site in 1989 and are protected by the Bhopal Circle of ASI.



Western India



Ι

View of Chittor Fort with the Victory Tower (Vijaya Stambha) seen in the distance. India's largest fort, Chittor was the capital of the rulers of Mewar from the 12th to 16th century and stands as a testimony to the heroism and gallantry of the rulers. The fort and structures are protected by the ASI under its Jaipur Circle.

2

The Khan Masjid at Dholka, Ahmedabad District, by Henry Cousens, from the ASI's Bombay Presidency Albums, Volume 11, 1902–03.

This mosque with three domed square halls and two solid minarets was built in the 15th century by Alif Khan Bhukai, a close companion of Mahmud Begada. The monument is protected within the Vadodara Circle of ASI.





Early photograph showing a street scene with the backdrop of the Teen Darwaza (Tripolia Gate) in Ahmedabad.

Ahmedabad was founded by Sultan Ahmad Shah in the 15th century. The Teen Darwaza is built to the southeast of the Bhadra Fort, the oldest fortification of the city. It is a protected monument under the Vadodara Circle of ASI.



View of Lila Gumbaz ki Masjid, Champaner, from the northeast. This mosque was built by Mahmud Begada in the late 15th century along with the citadel and many other mosques, palaces and tombs in the fortified complex. It is a protected ASI monument and falls within the UNESCO World Heritage Site of Champaner-Pavagarh in Gujarat,



Cave 26 at Ajanta, by Lala Deen Dayal, 1890, from the ASI's Bombay Presidency Albums, Volume 14.

The Ajanta World Heritage Site in Maharashtra, protected by the ASI, preserves the finest specimens of Indian art and is a milestone in the evolution of rock-cut architecture, painting and sculpture in the Buddhist world. This *chaitya* cave is especially known for the scene of the Buddha's Mahaparinirvana, which adorns an interior wall.

6

An 1870s view of caves at Ellora, by John Johnston who photographed extensively in Berar and Hyderabad in the 19th century.

Ellora, with its rock-cut architecture dating from the 6th to 9th centuries CE, is a UNESCO World Heritage Site under the protection of the ASI and falls within its Aurangabad Circle.





The interior of the *chaitya* cave at Karla, photographed by Alexander Caddy of the Survey in the 1890s.

This cave represents the culmination of the early phase of rock-cut architecture about the beginning of the Common Era. The site is protected by the Mumbai Circle of ASI.

8

The facade of Cave 10, Pandav Lena, at Pathardi, Nashik District, Maharashtra. The photograph shows a cave attendant and a notice board stating in English, Marathi and Gujarati that no entrance fee is charged to visitors.

Earlier part of the Bombay Presidency, the Pandav Lena caves are protected by the Aurangabad Circle of the ASI. There are 24 significant Buddhist caves at Nashik, of which Cave 18 is a *chattya* and the others are *vibaras*. These caves are contemporary to the cave at Karla.





View of the Church and Convent of St Francis of Assisi and the Se Cathedral, with landscaped garden in the front. Situated in Old Goa, these structures were constructed during Portuguese rule in the 16th–17th century. The Churches of Old Goa are collectively inscribed as a UNESCO World Heritage Site and are protected ASI monuments within its Goa Mini Circle,



Eastern India



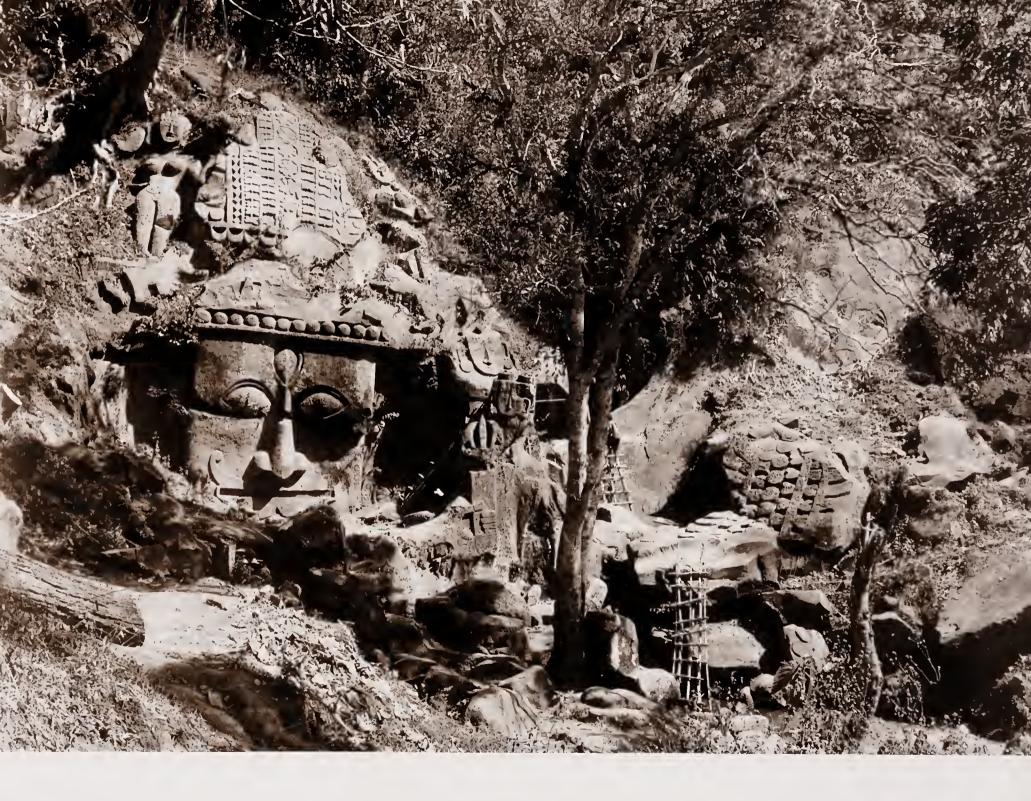
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The remains of a fort in Dimapur, Nagaland. This 1920s view shows the east face of the monoliths. This site is a protected monument under the Guwahati Circle of ASI. Other protected sites in Nagaland are the Memorials of Mr G.H. Damant, Major Cook and Subedar Nurbir Sahi in Khonoma, the Stone Cairn to the memory of Mr Damant in Kohima and Lt. H. Forbes's Grave in Suchima.

2

View of the west face of the rock-cut reliefs of the Unakotitritha in the Unakoti Range, north Tripura. This photograph from the ASI Collections was most likely taken in the 1970s.

The sculptures and rock-cut reliefs of the Unakoti range are protected by the ASI under its Guwahati Circle. The other ASI monuments in Tripura are the Ancient Remains at Baxanagar in west Tripura, the Gunavati Group of Temples and Chaturdasa Devata Temple in Radha Kishorpur, Bhubaneshwari Temple and Thakurani Tilla in south Tripura.





Photograph of the west face of the door frame of a stone temple at Dah-Parvatia in Tezpur, District Sonitpur, Assam, taken in the 1920s.

The mound and ruins of this stone temple are protected by ASI Guwahati Circle. The Survey has over 55 protected sites in the state of Assam.

A view of Adina Mosque at Pandua, Malda District, West Bengal, from the ASI's Bengal Albums, Volume 4, 1904–05.
Built by Sultan Sikandar Shah of the Ilyas Shahi dynasty in 1374–75, this monumental edifice represents the zenith of the Islamic sultanate architecture of Bengal. The mosque is protected within the Kolkata Circle of ASI.





A 19th-century view of the Radha Binod Temple, commonly known as Joydeb Temple, in District Birbhum, West Bengal.

This masterpiece of terracotta architecture in the *navaratna* form of temple construction was built in 1683. It is profusely ornamented with beautiful terracotta sculpture representing the *dashavatara* of Vishnu and scenes from the Ramayana. The site is protected by ASI under its Kolkata Circle.

6 (see also page 5)

General view of Sher Shah Sur's Tomb at Sasaram from the ASI's Bengal Albums. This early photograph of the site by Joseph David Beglar of the Survey is datable to the 1870s. Sher Shah Sur (r. 1540–45) is regarded among the truly greatest rulers of India. One of the noblest specimens of Pathan architecture in India, his monumental mausoleum stands in the middle of a square tank, reflected in its waters. The three-tieted structure on a low octagonal plinth was the largest Islamic tomb in India at the time of its construction. It is a protected monument under the Patna Circle of ASI.



Eastern India 187



An 1870s photograph by Joseph David Beglar, showing the Baladitya Temple at Nalanda, from the ASI's Bengal Albums, Volume C. Alexander Cunningham pursued his passion for tracing Buddhist monuments from the accounts of Chinese pilgrims, and was assisted by J.D. Beglar and A.C.L. Carlleyle in the recording of monumental remains.

Nalanda Mahavihara was regarded as one of the greatest universities of the ancient world (5th to 13th centuries). The site is protected under the Patna Circle of ASI.

8

A photograph of the Ashokan column being excavated near Rampurwa, most likely by A.C.L. Carlleyle. The pillar was discovered by Carlleyle in 1877–78, who said that he found the upper portion of the capital of the pillar closely resembled the one at Lauriya. He dug a trench 8 feet deep along the pillar, exposing 40 feet of its length. In 1880–81, Wade Garrick was deputed to photograph the capital of the pillar.

The site of Rampurwa is protected under ASI's Patna Circle.





Photograph of the Sahasralinga Tank with the great temple of Lingaraj, Orissa, from the ASI's Bhubaneshwar Albums, Volume 3. An earlier view of the same tank by William Henry Cornish in 1892 shows it silted up with vegetation growth.

The Sahasralinga Tank and Lingaraj Temple are both protected by the ASI Bhubaneswar Circle.

10

An early photograph of the rock-cut elephant at Dhauli, on top of the rock bearing the Ashokan edicts, from the ASI's Orissa Albums, Volume 10.

Dhauli, located on River Daya at a distance of 8 kilometres from Bhubaneswar, was an important Buddhist centre. The site is known for the fourteen major Rock Edicts of Emperor Ashoka (3rd century BCE). The beautiful half-sculpture of an elephant is a masterpiece of Mauryan art and bears an important testimony to the development of sculptural art during this period. The Edicts along with the sculpture are protected by the ASI under its Bhubaneswar Circle.





II

A 19th-century view of the Konarak Sun Temple, from the ASI's Bihar and Orissa Albums, Volume 5. This temple was conceived as a chariot of Surya, the Sun God, with 24 wheels and six horses. Also known as the Black Pagoda, it was built in the 13th century by King Narasimhadev I (1238-64) of the Ganga dynasty. The temple is considered the culmination of the Orissan style of architecture. Excavations were undertaken at Konarak in 1901 to reveal the plinth with the wheels and the horses. T. Bloch observes in the ASI Annual Reports 1902-03: "As regards the mandapa of the temple, it has been decided to fill up the interior with stones and later on with sand. This is considered the best means of supporting it against collapse." This monument is a World Heritage Site and is protected under ASI's Bhubaneswar Circle.

12

William Henry Cornish's earlier photograph of the Sun Temple at Konarak, from the ASI's Bihar and Orissa Albums, Volume 5. The ASI *Annual Reports* 1902–03 mentions that around 1893, Babu P.C. Mukherjee was deputed to Konarak to take detailed drawings of the temple and he perceived that the entire plinth of the temple was buried beneath the sand.





An 1890s street view of Puri, Orissa, with the Jagannath Temple in the background. Image by William Henry Cornish, from the ASI's Bihar and Orissa Albums, Volume 5.

Percy Brown records: "...it [the Temple] was originally built as a pillar of victory by Chora Ganga, the conqueror of Kalinga in 1030 A.D., but it was not consecrated until A.D. 1118." The Jagannath Temple is characterized by four principal parts — rekha deul, jagamohan, nat mandapa and bhog mandapa. The temple and the subsidiary shrines are protected within the Bhubaneswar Circle of ASI.



SOUTH INDIA



]

View from the Qutb Shahi Tombs looking towards Golconda Fort, by Lala Deen Dayal, possibly taken around 1885 when he was appointed court photographer to the Nizam of Hyderabad. Located in the city of Hyderabad, the Golconda Fort, Qutb Shahi Tombs and Charminar are iconic landmarks of the Islamic Deccan Sultanates from the Qutb Shahi period. Golconda Fort, which was the legendary centre of the diamond trade in the medieval world, is a National Monument protected by ASI's Hyderabad Circle.

Image courtesy Indira Gandhi National Centre for the Arts (IGNCA), New Delhi.

2

Charminar, Hyderabad, c. 1950s, from the ASI's Selected Monuments Albums, Volume 2. The Charminar was built to mark the foundation of the city of Hyderabad in 1591. This urban icon at the centre of Hyderabad's axial layout represents the zenith of Islamic architecture under the Deccan Sultanates. It is an ASI monument in Andhra Pradesh, within its Hyderabad Circle.

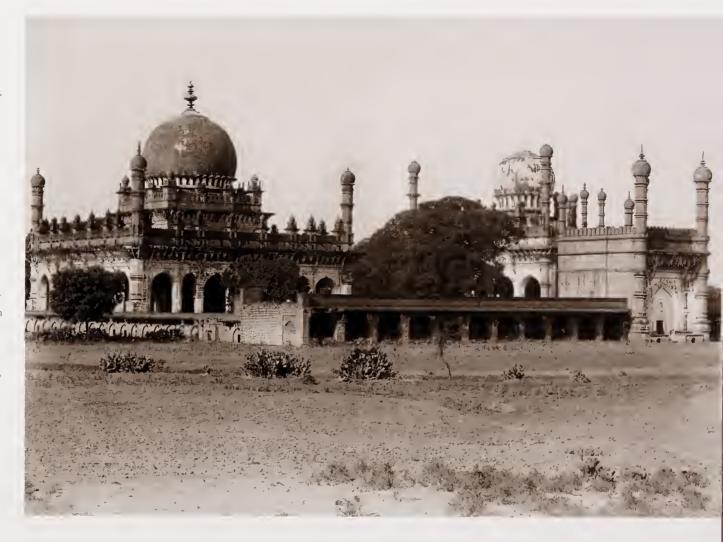




Gol Gumbaz, Bijapur, by Henry Cousens. Cousens joined the Survey in 1875 and was Superintendent of the Western Circle in the 1890s. He wrote, "Muhammad Adil Shah (1626-1656)...has left one of the greatest domes the world has seen, over his own tomb, the Gol Gumbaz. In building the walls of the Gol Gumbaz the builders appear to have first erected four great arches and then to have walled up their open spaces, so that an addition such as the above could have been easily added at any subsequent time, and the filling in under one of the great arches knocked out, to give access to it, without impairing the building. Below it is a vault corresponding in plan to the upper chamber, which goes far to show it was intended for a tomb...on the west, and standing on the edge of the platform, is the well proportioned mosque attached to the tomb, but which has, unfortunately been converted into a travellers' bangla by unsightly cross walls, doors, windows and whitewash,"

Bijapur's Gol Gumbaz is a protected monument under the Dharwad Circle of ASI.

View from the northeast of Ibrahim Rauza, Bijapur, by Henry Cousens, 1880s, from the ASI's Bombay Presidency Albums, Volume 5. Cousens extensively documented and photographed monuments in Karnataka, Maharashtra and Gujarat, In his book on Bijapur, he wrote, "The group of buildings collectively known as the Ibrahim Rauza is situated a short distance to the west of the city, beyond the Makka gate. Upon a high platform within a great square enclosure are two large buildings facing one another with a reservoir and fountain between them. Between this platform and the surrounding walls, on three sides, is a level green sward, where at one time were royal gardens. The building on the east side of the platform is the tomb of Ibrahim (II) Adil Shah, his queen Taj Sultana, and four other members of his family. ...this inner ceiling was the chef d'oeuvre of the architect of the Ibrahim Rauza...both the tomb and the mosque opposite to it are noted for their deep rich cornices and graceful minarets." The monument is protected within the Dharwad Circle of ASI.





Photograph of the ruins of the chariot at Vitthala Temple, Vijayanagara, Hampi. The ruins of Vijayanagara were photographed by Captain Alexander Greenlaw in 1856 and by Edmund David Lyon a decade later. This mid 19th-century image shows the extant brick *shikhara* (which is now lost) above the granite base, with vegetation covering the ruins.

The Vitthala Temple complex is today part of the UNESCO World Heritage Site of Hampi in Karnataka, within the Bangalore Circle of ASI.

6

An early photograph of the Virupaksha Temple in Vijayanagara, Hampi, from the ASI's Madras Albums, Volume 58. The bird's-eye view shows the grand temple complex and the Hampi Bazaar in the foreground with the river Tungabhadra in the distance.

Vijayanagara rose to its zenith as a mighty military empire in medieval India. Several dynasties ruled from Vijayanagara, most notably the Sangamas and Tuluvas. Deva Raya I and II were the greatest of the Sangama rulers in the first half of the 15th century, while Krishna Deva Raya (1509–29) was an iconic ruler of the Tuluva dynasty. Hampi in Karnataka is inscribed as a UNESCO World Heritage Site, its monuments protected within the Bangalore Circle of ASI.





View of the Hoyasaleshvara Temple, Halebid, from the ASI's Madras Albums, Volume I, dated 1902-03. This photograph bears the stamp of Wiele & Klein, the leading photographic studio in south India from the 1880s. Based primarily in Madras Chennai), Wiele & Klein also had studios in Bangalore and Ootacamund among other locations. The Hoyasaleshvara Temple of Halebid in Karnataka was built during the rule of the Hoyasala dynasty in the 12th century, and represents the culmination of the later Chalukyan style. The stone used was of much finer grain - a greenish or bluish-black chloritic schist, which allowed intricate carving. Exquisite carvings are seen on the exterior and interior of the temple. It is a protected monument within the ASI Bangalore Circle.

8

A panoramic view of the "Great Conjeevaram Temple" in the erstwhile Madras Presidency, from the ASI's Madras Albums, Volume 1, 1902–03. The image captures the stunning skyline of a south Indian temple complex with its *gopurams* towering over the landscape.

Kanchipuram is a historic temple town in Tamil Nadu and was the capital of the Pallava dynasty from the 7th to 9th century. It demonstrates, through its temple architecture, the evolution of the south Indian temple form which reached its apex in the Chola and Pandya periods. The town has a rich living tradition of silk weaving that has survived for centuries.





A panoramic view of the Thanjavur townscape and Thirumala Nayaka's Palace taken from the Rajagopal bastion of the Thanjavur Fort. Photograph from the ASI's Madras Albums, Volume 41. From the tower, a bird's-eye view of the town shows the roofscape of terracotta tiles; rising above these are the tower of the observation platform to the right, and at the centre the lofty pyramidal roof of the 16th-century Nayaka palace that resembles the vimana of the Brihadeshvara Temple. Alexander Rea as Archaeological Surveyor to the Government of Madras compiled the "List of Ancient Monuments Selected for Conservation in the Madras Presidency, 1891" and assigned the status of "high architectural importance" to the Palace. The Rajagopal bastion of Thanjavur Fort is protected within ASI's Chennai Circle.

10

A 19th-century photograph of the Rock Fort at Trichy (Tiruchchirappalli), from the ASI's Madras Presidency Albums, Volume 17.

The impregnable fort at Tiruchchirappalli in Tamil Nadu was constructed by the Nayakas of Madurai who made this town their second capital in the 16th and 17th centuries. The Fort Gateway, Rock Fort, and Caves are protected monuments within ASI's Chennai Circle.





ΙI

The Sivaganga Tank and Nataraja Temple at Chidambaram. A photograph by the studio of Wiele & Klein showing the lofty *gopuram* and colonnades surrounding the sacred tank.

The town of Chidambaram is a sacred site where Shiva is believed to have performed his cosmic dance, the Tandava Nritya, and the temple of Chidambaram is dedicated to Shiva as Nataraja. Built by the Cholas, the temple has four lofty *gopurams* dominating the town's skyline. Alexander Rea as Archaeological Surveyor to the Government of Madras, carried out an extensive photographic documentation of the temples and monuments of south India.

12

An image taken from the southwest of the Shore Temple at Mahabalipuram (Mamallapuram), Tamil Nadu, from the ASI's Madras Albums, Volume 45, dated 1939—40, showing the protective revetment wall to the south of the temple. Henry Hardy Cole had reported on repairs to the temple: "Mr. Black has recently been at the Seven Pagodas, where, as suggested by me, he cleared away the sand from the ancient Shore or Alaiva temple, and (as I expected) revealed the walls of a courtyard to the east, thus bringing to light a most interesting adjunct to the building, which appears to be unique in its architectural treatment."

The Shore Temple, Mamallapuram is a Protected Monument within the Chennai Circle of ASI.





Photograph of a traditional Malabar building, from the ASI's Madras Presidency Albums, dated 1910.

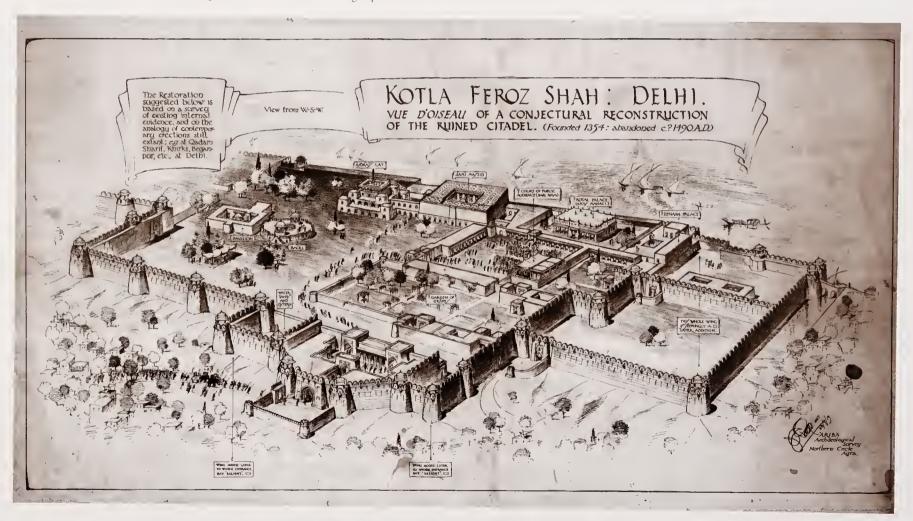
The typical Kerala style of architecture is characterized by sloping timber roofs with generous overhangs. It is the same sloping roofs, often tiered with a general use of wood and brackets in superstructures, that define the character of the temples of Kerala. The Thrissur Circle of the ASI protects some iconic buildings of the Kerala style such as the Mattanchery Palace in Cochin (Kochi), the temples of Parasurama, Brahma, Shiva and Matsya in Thiruvallam and the temple of Shiva in Oorakam.



Drawings

I

An isometric drawing dated September 29, 1919 prepared by the Archaeological Survey, Northern Circle, Agra, showing a conjectural reconstruction of the ruined Tughluq citadel at Kotla Firoz Shah, Delhi. The bird's-eye view from west and southwest is described as follows: "The Restoration suggested below is based on a survey of existing internal evidence, and on the analogy of contemporary erections still extant, e.g. at Kadam Sharif, Khirki, Begampur etc., at Delhi."



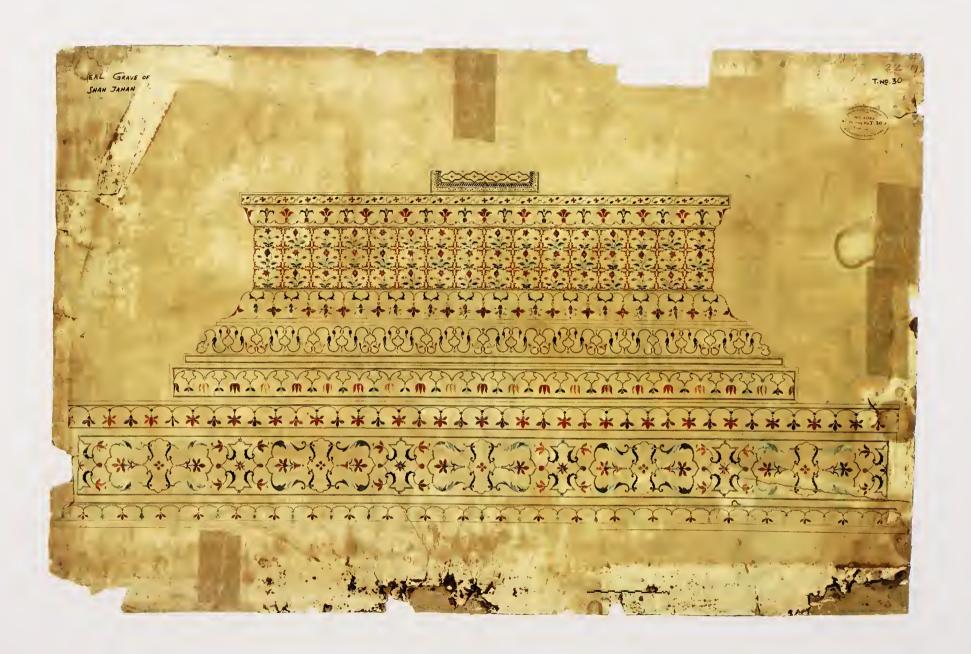
An isometric drawing dated January 1920 prepared by the Archaeological Survey of India, Delhi, showing a conjectural restoration of the Qutb Complex. The view illustrates the subsequent extensions of the original mosque.

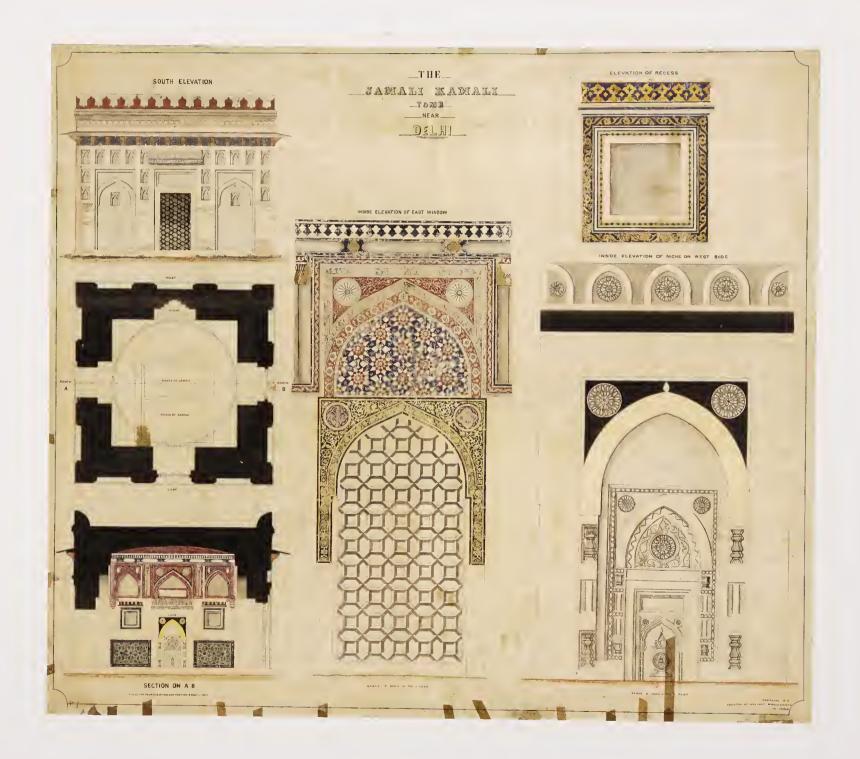


3 and 4

Coloured drawings of Akbar's Tomb at Sikandra and Shahjahan's Tomb in the Taj Mahal, prepared by E.W. Smith. Smith was appointed Head Draftsman in the North West Provinces and Oudh Circle at a salary of Rupees 190 in 1886. He made exquisite drawings of the monuments of Jaunpur and Orchha, and prepared a book titled *Moghul Colour Decoration of Agra*, published by the Archaeological Survey of India in 1901. The book included various colour plates of drawings of decoration and motifs seen in Mughal monuments in Agra. It was sold at Rs 22 a copy.







5

Coloured drawing of elevation, plan, section and details of the tomb of Jamali Kamali in Delhi, prepared under the supervision of Captain Henry Hardy Cole, RE, Curator of Ancient Monuments in India. Cole initiated the exercise of documenting the monuments of Agra, Delhi, Lahore and Amritsar in the early 1880s. The work of site measurements and preparation of fair drawings was undertaken by his band of travelling draftsmen. He continued this practice as Curator of Ancient Monuments when he was accompanied on tours by a team of draftsmen who prepared 469 plans, sections and elevations of the sites surveyed within the first year. While many draftsmen continued to be Europeans and military men, the inclusion of "natives" in this massive documentation exercise had gradually begun. Cole credited Thakoor Dass and Habib-oo-lah for preparing pencil drawings, and Ghulam Muhammad served in the Punjab and North West Provinces.

6

A pencil sketch of the doorway of Cave 22 at Ajanta. The sketch was prepared by Henry Cousens of the Government Archaeological Survey. Cousens joined the Survey in 1875 and became the Superintendent of the Western Circle in the 1890s. He extensively documented and photographed monuments in the regions of Karnataka, Maharashtra and Gujarat. This sketch was published in Archaeological Survey of Western India: Buddhist Cave Temples (Volume IV).



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Contributors

Dr Gautam Sengupta has published extensively on the art history and historical archaeology of eastern and northeastern India. He is currently Director General, Archaeological Survey of India.

Abha Narain Lambah is a conservation architect who has worked on the masterplanning for Ajanta Caves and Qutb Shahi Monuments in Hyderabad, and the conservation of 15th-century temples in Hampi and Ladakh. She is a recipient of the Sanskriti Award, Eisenhower Fellowship and seven UNESCO Asia Pacific Awards for Heritage Conservation. Abha has co-edited Architecture of the Indian Sultanates and Conservation After Legislation: Issues for Mumbai, and has authored Through the Looking Glass: The Grade I Heritage of Mumbai.

Dr Arundhati Banerji, former Superintending Archaeologist in charge of publications, has worked with the Archaeological Survey of India for many years. She has edited and authored a number of books and articles in national and international journals. Currently she is the editor of the prestigious *Journal of the Indian Society of Oriental Art*.

Dr B.R. Mani is a field archaeologist, numismatist and art critic, who presently serves as Additional Director General, Archaeological Survey of India. He has discovered a large number of archaeological sites and has directed more than fourteen excavation projects in the country – Lal Kot and Salimgarh (Delhi), Muhammad Nagar and Harnol (Haryana) and Saswmbaran (J & K), among others. He has four books and about 170 research papers to his credit.

Janhwij Sharma, a conservation architect by training, joined the Archaeological Survey of India in 2008 and currently works in the capacity of Director (Conservation and World Heritage). He recently worked on the National Policy on Conservation of Protected Monuments. He has published Architectural Heritage of Ladakh, besides contributing several articles on architecture and conservation issues to journals and architectural magazines both nationally and internationally. He has participated in a large number of workshops and seminars all over the world.









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ARCHAEOLOGICAL SURVEY OF INDIA Ministry of Culture, Government of India

